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THE GERMAN TARIFF CONTROVERSY.

BEGINNING with the sixties, Germany pursued a free-trade policy, but changed her policy in 1879. The new tariff was constructed upon the principle of universal though moderate protection. In 1885 and 1887 the duties protecting agriculture were raised.

This new condition of affairs carried out the wishes of the agricultural and part of the manufacturing classes. Of course, the export industry had protested against the change; but its fear lest other nations would respond to the increase of the German tariffs with an increase of their own, especially on German manufactured goods, was realized only in one or two instances.

As a matter of fact, the export industry was helped by the fact that, following the lead of France, a number of European states concluded tariff treaties with one another. It is true that Germany, holding aloof from this movement, remained in a fairly free position, binding herself only as to a few duties; and she limited the scope of her treaties chiefly to "the most-favored-nation" clauses. As a result of the treaties, however, German export industry

received in full all the privileges which the reciprocity tariffs of France and other countries granted to the contracting nations. The rates of these reciprocity tariffs were materially lower in amount than those of the general tariff, and they were established for a considerable length of time.

*Duobus rixantibus tertius gaudet.* In this case, Germany was the delighted third. While other nations bickered with one another for reduction of customs duties, she shared in all the profits without the cost of contention. On February 1, 1892, however, was terminated the situation which had such considerable benefit for us. Then the French tariff treaty and most of the others expired. The danger of a complete revolution of the previous tariff situation was imminent. In France a strong current towards protection had gained the ascendancy; and among the other countries the intention was becoming more and more apparent of rearing, in the future, higher walls against foreign competition. Russia, since the Turkish war, had gone on from one increase to another. The United States, which like Germany and Russia had held aloof from the reciprocity movement, had, by the enactment of the McKinley tariff, accentuated more strongly than ever its traditional inclination towards a Chinese wall.

In the face of this situation, Germany had to ask herself these serious questions: Ought she to follow the example of other states in view of the threatening high protection era, and thereby increase considerably the tendency towards mutual trade exclusion, or should she seek to prevent the further development of these tendencies and to secure for herself a decisive influence in the future formation of European trade systems, in the sense of international amity? \*—that is to say, to try to rehabilitate the system of reciprocity that had broken down.

Manufacturing interests urged the latter course. In 1879 they had been eager for the sliding-scale,—for the

\* *Official Memorandum*, December, 1891.

greatest possible elasticity of the national customs system. Now their desire was for the greatest possible stability of the tariff system for those people who were their customers. Since 1879 they had grown stronger and stronger, and had conquered larger and larger territories or sections of the world-market. To be protected against imports, through customs duties of moderate amount, was now of less importance to them. On the other hand, it was more than ever important to them to be able to develop their exports still further,—at least to have the assurance that they would never again be suddenly checked, as recently, by Russian and American measures. The more generally the protectionist belief extended outside of Germany, and as the very disadvantageous situation was more and more keenly felt as the date of expiration (1st of February, 1892) approached, the more did people make up their minds to the idea of a comprehensive tariff arrangement of long duration.

The ministry was also persuaded that this was the proper course, and that stability in the conditions of international exchanges was an indispensable condition to the prosperous development of domestic industry. Without treaty these conditions could not be guaranteed. The interest of the export industry coincides with the general interest, which meant that, if exports were to be increased and strengthened, foreign countries must be allowed to pay for the wares received with commodities of their own, and fewer restrictions must be placed upon imports than formerly.

It was clear that tariff treaties would be purchasable only at the price of certain sacrifices which our producers would have to make. In order to influence other nations to reduce permanently their tariffs on German manufactures, Germany must treat them in the same way. Concessions at the hands of agricultural nations, such as Austria-Hungary, Italy, and Russia, were to be obtained

only by the reduction of certain duties on agricultural commodities; concessions at the hands of manufacturing nations, like Belgium and Switzerland, by the reduction of certain German duties on manufactured products. In the first case certain branches of our agriculture had to pay the price, in the second case certain branches of our manufactures: therefore, opposition from various sides must be overcome. But, thanks to the exceedingly skilful, determined advocacy of this new course by the Chancellor and by Herr von Marschall (at that time foreign secretary), the first treaties (those with Austria-Hungary, Italy, Belgium, and Switzerland) gained in a short time the assent of the Reichstag. This occurred during the years 1891 and 1892.

The agreement with Russia, on the other hand, met with far more determined opposition. The diminution of the tariff on grain from 5 marks\* to  $3\frac{1}{2}$  marks, which had been made in the Austro-Hungarian treaty, had not especially aroused the opposition of the agrarian party. The reason for this was that the grain competition of these nations was on the decline. But, when the imperial administration suggested a like concession to Russia, a great storm of opposition broke loose. After a tariff war had raged for some time with the czar's realm, this act of international amity was consummated,—an act of great importance to manufacturers, the non-effecting of which would by no means have helped agriculture materially; for, if the duty of 5 marks against Russia were maintained, even though less Russian grain would be imported, more grain would be brought in from America, Hungary, and Rumania, subject to a duty of  $3\frac{1}{2}$  marks, owing to the continuation of the "most-favored-nation" arrangements.

The details of the individual concessions in respect to the agrarian and manufacture duties I cannot here

\*Per 100 kilograms. The examples following refer to units per 100 kilograms.



enter upon. The characteristic feature of the new German reciprocity tariff was the reduction of agricultural — especially grain — duties.

The wheat and rye duty was reduced

	Marks.		Marks.
from . . . . .	5	to	3½
that on flour . . . . .	10½	"	7½
oats . . . . .	4	"	2.80
barley . . . . .	2.25	"	2
malt . . . . .	4	"	3.80
maize . . . . .	2	"	1.60

Furthermore, the duty on imported wood (first levied in 1879) was diminished by one-fourth. The duty on wine, formerly increased, suffered a diminution of from 24 to 20 marks; but red natural wine and unfermented grape juice were reduced from 24 to 10 marks. Duties on meat were reduced from 20 to 17 and 15 marks, the duty on hogs from 6 to 5 marks, on butter diminished by 20 per cent. and on eggs by 33 per cent.

The "landed interest" of the great grain producers and forest owners east of the Elbe, as well as the vine-growers of the west and the cattle-raisers, had suffered a defeat.

# I.

The reduction of the grain duties was first arranged in a treaty with Austria-Hungary. At that time, 1891, as a result of poor harvests in Germany, France, and Russia, the price of grain was unusually high. After 1892, however, for a period of several years the price went steadily and rapidly down. The Cologne quotations for 100 kilograms of rye, wheat, and flour, and the Mannheim quotations for barley and oats, were as follows:—

	Rye.	Wheat.	Flour.	Oats.	Barley
1891 . . . . .	22.2	23.2	31.0	16.1	18.7
1892 . . . . .	19.1	19.2	26.2	14.6	16.8
1893 . . . . .	15.2	16.4	22.1	16.7	17.7
1894 . . . . .	12.7	14.1	19.2	14.2	15.3
1895 . . . . .	12.6	14.7	20.2	12.9	15.7
1896 . . . . .	13.0	16.2	21.4	13.8	16.1
1897 . . . . .	13.8	18.4	23.9	14.1	16.7

The principal reason for this serious fall in prices was that Nature, which in 1891 had been so niggardly, was bountiful for a long time after that, bestowing upon Germany a series of good, and in some cases splendid, harvests. From 1892-97 the yield of wheat and rye, which had suffered the greatest fall in prices, was far above the average for 1880-97.

The price of grain sank by more than a mark and a half; that is, by more than the amount by which the grain tariff had been reduced. In a calm consideration of the actual situation the disturbance in prices could be attributed only in very small part to the tariff arrangement. The spokesmen of agriculture, however, deliberately ignored the glut, which was the chief cause, and threw all the blame upon the tariff reduction.

The "man without a stake in the soil," as Count Caprivi once described himself, had, without sympathy for or understanding of the agricultural interests, cut from their skin the hide which he offered to the treaty states as the price of their indulgence to our industries. Unfortunately, the customs treaty was intrenched in a long reprieve,—until 1903. It was necessary to take timely measures against the danger that after its expiration it should be maintained, or that even worse treaties should be made, still more disastrous to landed interests. If in the future they were to tie their hands at all, then it was the turn of the moneyed interests to pay the piper.

As early as 1892 an attempt had been made to found a "party of the plough." The first effective appeal came from a Silesian tenant. "I propose," says this call of December, 1892, "that we join with the Social Democrats, and resist the government with determination. We must proclaim ourselves. Only as we follow class politics ruthlessly and undisguisedly, can we possibly save ourselves."

In February, 1893, the Bund der Landwirte was

founded. (I will hereafter, for the sake of brevity, refer to it as the *Bund*.) It has carried out in masterly fashion the program of the foregoing appeal, and has with indefatigable zeal and admirable energy (with a zeal and energy which unfortunately have not been imitated by the opposing party) striven to make the agricultural interests the decisive factor in German politics. Its agitation in form and scope unprecedented in Germany imbued public opinion with an amount of agrarian spirit which would earlier have been thought impossible.

As Herr von Siemens said, "The belief that agriculture was in need of aid almost became the criterion of a gentleman: to doubt the value of the grain duties became the indication of an enemy of one's country and a revolutionist." \*

In the beginning the continuing low price of grain served as the most telling watchword of the *Bund*. When, after 1897, the price of grain again rose, it found a second no less telling cry,—*Die Leutenot* (scarcity of agricultural labor).

Thanks to the continuing good harvests, to the tariff treaties, to the development of shipbuilding dependent upon the latter, and to the rapid development of electrical industries, there began in the middle of the decade a period of great prosperity. The result was that agriculture lost many laborers. A great wave of population flowed into the coal regions and the manufacturing districts. One of the leaders of the *Bund* recently declared: "The landed interests will be injured, even more than through foreign competition, by an industrial system artificially favored and skilfully promoted, which through raising of wages by leaps and bounds renders an intensive agriculture absolutely impossible. Increasing expense and diminishing income are in the long run irreconcilable."

The industrial boom would indeed have come if the old course of adjustable tariffs had been continued. It would

\* Last essay in *Mitteilungen des Handels-Vertragsvereins*, 1903, p. 41.

have come to pass as a result of the continuously bountiful harvests and the rapid development of electrical industries, both of which movements were completely independent of tariff treaties. But, as to the scarcity of hands also the spokesmen of the land-owners deliberately ignored the other causes, and held as exclusively responsible the "accursed" system of "the little successor of the great Chancellor." The export-orgy must cease. To further the exportation of manufactured articles by the importation of agricultural articles, as happened in 1892-4, meant to condemn agricultural interests to perpetual impoverishment.

Like the fall in prices, the diminished number of farm laborers affected most seriously the landlords east of the Elbe. They were the ones chiefly interested in the future reversal of the trade policy of the empire. They were the ones who inaugurated, officered, and financed the *Bund*. But, in order that the *Bund* should become a power in public life, the lords must obtain a following from their former vassals. Here the fact of *die Leute* not came in handy. While the clamor over the low prices of wheat and rye could only slightly disturb the great masses of German small farmers, the need of laborers was felt by every one. The more the industrial boom increased, towards the end of the decade, the more plausible did it seem to the medium and small land-owners that they must make common cause with the large land-owners.

But the consciousness of a common enemy in industry would not have sufficed to bring these elements together. To that end it was still necessary to reconcile conflicts of interests existing among the agriculturists themselves. The mass of the small farmers during the previous decade had turned more and more to cattle-breeding and allied rural employments. Higher duties on barley, hay, and Indian corn, necessarily raised the rents of grain-producing

land, but made fodder more expensive for the small farmers. Higher duties on wheat and rye benefited only the minority who produced more than they needed for their own consumption, while they injured all those who were obliged to buy their own bread-stuffs. An increase in the tax on fodder was opposed to the interests of certain agricultural groups as producers, and the increase of the tax on bread-stuffs was opposed to the interests of certain agricultural groups as consumers.

Had the landed aristocracy and the farmers of the public domain of eastern Prussia written for the *Bund* a platform limited to those things in which they were interested,—namely, to the increase of the grain duties and eventually of timber duties,—the power of the *Bund* to attract followers would have remained rather limited in spite of the scarcity of labor. In order to raise it to the highest possible maximum, the bait of the drag-net tariffs was necessary.

In order that each agricultural factor might be brought under the banner of the *Bund*, every faction must be given a share of the spoil. Hence the demand was for a "double" tariff (of minimum and maximum duties), with rates materially raised on *all* agricultural articles: a minimum duty of  $7\frac{1}{2}$  marks, as against  $3\frac{1}{2}$  formerly, upon the four chief kinds of grain; a minimum duty of 18 marks on live stock; correspondingly stiff rates upon animal products, garden products, oil products, vegetables, and flowers. Only when this program should be accepted in its entirety, only when, thanks to the minimum duties, they had the assurance of not being worsted in future treaties, could the agrarians undertake to support any of the demands of industry for duties: otherwise, they would fight to the utmost. For years in all parts of Germany was heard this catch phrase of "the seamless fabric" of heavily increased agrarian duties. "Come unto me, all ye who are weary and heavy-laden." The *Bund*

promised to satisfy even the most extravagant demands, and stimulated them where they were not already active.

The result well repaid the effort. The country people joined hands for the fight against the people of the cities. Terrified by the danger that the agriculturists would give notice to terminate the tariff deal, a large part of the industrial people only dared in mild tones to protest against this very audacious program. They assented to it, indeed, with the reservation that good treaties might after all be concluded, extending, or at least protecting, exports, while the *Bund* had announced repeatedly and clearly enough that it left the renewal of treaties an "open question," and that it regarded the carrying of the minimum duties as a *conditio sine qua non*. Should the future negotiations with Russia and other countries be wrecked by those minimum duties, German industry would have to yield.

Count Caprivi, at the close of 1894, had to resign his chancellorship. Thus the minister who probably would have had sufficient backbone not to give way to the *Bund* was gotten out of the way. In 1897 also Herr von Marschall resigned. The venerable Prince Hohenlohe, a man indeed "with a stake in the soil," but no agrarian, possessed no longer the strength or disposition to carry on an energetic contest over a problem the settlement of which would not become necessary before 1903, when in all human probability he would no longer be in office. The actual leadership in German politics passed to Herr von Miquel, who had been Prussian minister of finance since 1890, and vice-president of the cabinet since 1897; but this man has had at all times a certain weakness for the agriculturists. It is true, it was not his intention to confirm entirely the extreme desires of the *Bund*. On the contrary, he announced the policy of a compromise of the contending parties upon a "middle line," professing the principle of the "parity of all national activities,"—

the simultaneous protection both of agriculture and manufactures. Fine but empty words, in view of a flood of ruthless agrarian agitation, which was intent on anything but parity, which desired simultaneous protection only on the understanding that it should be arranged exactly as it conceived it, which had committed itself to the most far-reaching claims in order to have behind it the whole agricultural population. Empty words, which even so eminent a parliamentary tactician could not have brought to fulfilment.

After he had withdrawn from the cabinet and Count Bülow had become Chancellor, Count Posadowski took the helm of trade politics, and guided it further in Miquel's direction.

In the year 1897 the so-called "Committee for the Preparation of Economic Measures" was summoned. This committee was to be given a provisional hearing as experts on the subject of the plan to be evolved for the new general tariff. In this committee the agriculturists, especially the large landed interests, were represented in a more considerable proportion than other occupations. The *Deutscher Handelstag*, the official representative of industry and trade, was granted only as many delegates as the *Centralverband der deutschen Industriellen*, a private union of certain decidedly protectionist branches of industry, especially the "heavy" iron industry. The composition of this consulting body upon the tariff proved that Posadowski was disposed to concede as much as possible to the party of protection for the national industries. The negotiations were carried on in secret. This much, however, leaked out: that when, by way of exception, the members of the advising body showed any moderation, the government commonly intimated that they should ask more.

Posadowski desired, first, a much more specialized general tariff than the former ones, and, second, a general

tariff with much higher rates. The object of both considerations was to secure a better weapon in the tariff treaty negotiations.

He argued thus: It frequently happens that another nation lays stress only on securing a reduction of rates on certain specialties, and is disposed to pay for this concession with one equally advantageous to us. But, if now the customs act be made up too summarily, and these specialties bunched together with many other articles under one head, we must lower the rate on the whole group for the sake of one article. The result of that would be that third nations, having the advantage of "most-favored nation" clauses, would profit by the reduction of the duties on the other commodities included in the same group, without having to pay an equivalent of their own therefor. The more specialized the customs act, the more compensation material there would be for treaties; and, the more general, the less there would be.

And, furthermore, the higher the rates of our tariffs, the greater the *aplomb* with which our diplomats could enter into negotiations. The higher our tariff, the lower would nations with whom we deal bow to us, and the more generous they would become in order to make us better disposed.

The outcome of this argument, entirely plausible to the overwhelming majority of the Economic Committee, was the tariff bill of 1901. It was a monster in bulk, with its 946 groups, hardly less specialized than the English tariff of the forties, which was then so energetically condensed. A giant in content! It is true it did not realize all the sanguine expectations in which the *Bund* and the *Centralverband* had revelled. Yet it contained high minimum rates for all kinds of grain, high tariffs on all the other agrarian products, and even many forms of manufactures secured sensibly higher rates.



The parliamentary commission, after the first reading *in plenum*, considered the project thoroughly,—so thoroughly, in fact, that daily fees were accorded the gentlemen. In this commission the wedge of protectionism was driven in still deeper. The majority in the ministerial committee as well as in the commission were high protectionists. But the agrarian element was more than ever predominant in the latter. When the representatives of manufacturers did not say *Ja* and *Amen* to all their demands, they were punished by the readjusting of the tariff on many manufactures to a lower rate. At the same time the agrarian duties were readjusted to a higher rate.

In the autumn of 1902 began again the debate *in plenum*. The battle raged for many weeks. Sometimes it seemed as if the tariff campaign would never end. The *Bundesrath* declared that the project had reached the utmost that the agricultural class could be offered: the majority supported the commission's decision. The minority resorted to methods of obstruction; and there was talking against time, such as our parliament had never heard before. Early in December, however, a compromise was concluded between the Chancellor and the parties which constituted the majority (that is, the Conservatives, the Centrals, and the National Liberals). Immediately afterwards the Opposition was gagged by means of an act of parliamentary authority of which it is needless to speak here more exactly. On the 14th of December, 1902, after a record sitting of nineteen hours, the new general tariff was accepted *en bloc*.

But even though the marshalling of the protectionist groups upon the "middle line" has succeeded, and though 202 voices against 100 \* have been registered in favor of the principle of increased simultaneous protection of agriculture and industry, the tariff controversy is by no means

\* Ninety representatives were absent, yet with a full attendance the ratio of yeas to nays would not have been appreciably different.

settled. The decisive battle is still before us,—the struggle over the tariff treaties,—and the battle will rage fiercely.

The extreme Agrarians held aloof from agreeing to the compromise between the Chancellor and the parties of the majority. It is true the tariff contains minimum rates for wheat, amounting to  $5\frac{1}{2}$  marks; rye and oats, 5 marks; malt barley, 4 marks. These rates are not only appreciably higher than those of the reciprocity tariffs hitherto in operation, but in some cases higher even than those of the present general tariff in operation; and, in addition, the tariff contains materially higher rates upon cattle and on all other agricultural products. But, according to the decision of the commission, the minimum rate for grain should have been  $\frac{1}{2}$  mark more, and for barley  $1\frac{1}{2}$  marks more; and minimum duties on cattle and cattle-breeding products should have been raised. In both of these important points the majority parties had yielded. The Chancellor had yielded only so far as to concede to malt barley a minimum rate of 4 marks; that is, twice the former treaty rate.

This fact, then (that too few agrarian duties were fixed definitively, and that, moreover, these few duties had been raised only by a very small amount; namely, 5 or  $5\frac{1}{2}$  marks as against  $3\frac{1}{2}$  marks), induced the *Bund* to let the representatives which it controlled vote against the tariff. In this it risked nothing, as the acceptance of the bill was assured.

On the other hand, it gained free play for the future in raising its arrogant cry of "all or nothing." Thus it had in no way pledged itself, and could urge its agitation as recklessly as before. It could further excite its followers with the complaint that the agriculturists had not in the least gained what it was their just right to demand.

While the administration and the majority had hoped

that peace would grow from the roots of compromise, the demeanor of the agrarian demagogues was more belligerent than ever. Over and over again in the later period the leaders of the *Bund* threatened, if the ministers — those great posers, as Herr Hahn recently called them — should dare to make even small concessions in the matter of the unfixed agrarian duties, the *Bund* would make every effort to prevent the Reichstag from ratifying such treaties. The future treaty, declared Herr Örtel, must be the exact opposite of the past one: the government must say, "*Pater, pecavi*," in *optima forma*. To the middle parties, among whom, it was feared, would appear a tendency to make concessions on those agricultural duties which were not fixed (those parties being the Free Conservatives and the National Liberals), Herr von Wangenheim said that at the next election the *Bund* would wipe them off the face of the earth.

The situation is by no means cleared up as a result of the vote of December 14. How Germany's protectionist wall will look in the future is left entirely in the dark.

The only definite result is the fixing of minimum grain duties. The group of *Hauptagrarians*, as Schäffle terms them, the small but powerful group of producers in the territory east of the Elbe, has bagged its game. To the *Nebenagrarians*, the cattle-raisers, etc., as well as for the industrial people, the imposing cornice of the new tariff has for the present only a paper value, only the value of drafts whose worth is problematical.

The ministry wants reciprocity treaties, and believes that it can make them in spite of the high reciprocity duties on grain: reciprocity treaties are still possible, Count Bülow has said. Will the government go much below the present general tariff with those unfixed agrarian duties in order to realize this possibility? Is it inclined to such politics? Will it be confronted by other states with the alternative either of far-reaching conces-

sions in the matter of cattle duties, etc., in consideration for concessions to German manufacturers, or a tariff war? Nobody knows: two cases are conceivable.

I. The ministry might seek "compensation material" in the unfixed agrarian duties. For myself, I do not see how else she can induce Russia, Austria-Hungary, Rumania, Servia, and Italy to accord to our manufactured exports even as favorable conditions as formerly; and in that case the grain producers east of the Elbe will have "come out of it nicely," as we say, as the *beati possessores* of the minimum rates on grain. And our manufacturers also will have gained their point.

But then an elemental storm will begin within the *Bund*. The mass of the peasants, who only entered the *Bund* on the presupposition that they should have their drag-net tariff, will raise an outcry about the treachery of the landlords, who, they will say, have established themselves on solid ground, while the waves of foreign competition roll over the small farmers, as heretofore. The mass of these small farmers will call upon the representatives whom they have sent to the Reichstag to reject the agreements. They have, indeed, the majority of Agrarian representatives in their power; and, if they fall away, the landlords—i.e., the conservative party—can hardly do otherwise than oppose the tariff treaties, however unwillingly.

Though such treaties would be acceptable to the industrialists, they would not have the power to secure their passage; for, to do this, it would be necessary to win over the alliance of the free-trade parties of the Reichstag. The latter, however, who are opposed to any higher grain duties, would for this reason vote "No," and together with the members of the *Bund* overthrow the treaties.

II. If the ministry carries on its negotiations on the supposition that the far higher protection of the new general tariff shall be secured substantially and really to the

entire landed interest, it is impossible to perceive how Russia can be persuaded to negotiate further.

If it plays the miser in regard to agricultural duties, it must play the spendthrift with the manufacturing duties. Thereby nothing will be accomplished with Russia, Rumania, Servia, and Italy, and not enough with Switzerland and Austria-Hungary. It is true that the Swiss have an interest in the reduction of certain German industrial duties, especially the duties on textile goods and machines, but have hardly less interest in the reduction of our cattle duties. And the interest of Hungarian agriculture in gaining a larger share of the German market counts for far more than the analogous interest of certain Austrian manufacturing branches. By mere abatements in regard to manufacturing duties it would be impossible to gain an agreement with any states. An understanding might be reached with the governments, but not the legislatures. These methods could not possibly be successful except with Belgium.

If the outcome of the diplomatic negotiations should be the conclusion of a tariff treaty with the latter alone, the result will be particularly pleasing to the *Bund* and to the right wing of the Conservatives, which follows in its train. Both, indeed, want tariff treaties only on condition that they cost the agricultural class practically nothing, and that the manufacturing class bears the whole burden.

If the negotiations should be wrecked by the insistence of Russia, as well as Austria-Hungary and Switzerland, upon the reduction of certain German agrarian duties, this, too, would be pleasing rather than otherwise to the extreme Agrarians. In that case the new general tariff goes into full operation as far as these nations are concerned, and in that case also the east Elbian agriculture will receive considerably higher rates in place of those minimum rates which its spokesmen represent as "utterly inadequate." The prospect of a return to the system of

sliding-scales, even of the outbreak of another merry tariff war with all the nations whose competition our agriculture has to fear, does not frighten the country party at all.

However, if the diplomatic negotiations should turn out this way, the middle parties, which for that reason would like to wipe the *Bund* off the earth, would change their attitude. They had, it is true, supported the tariff, but only with the prospect that in spite of it — nay, rather by force of it (owing to the more powerful weapons which it would afford to our negotiators) — tariff treaties might be concluded such as our industry wishes and must wish. The National Liberals and a part at any rate of the Free Conservatives, becoming opponents of the tariff, would excrete their vote of December, should this supposition prove mistaken.

This is true not only of them, but also of the so-called governing party, the Centre, which has a foothold in the agrarian as well as in the industrial districts. Owing to the pressure from the *Bund*, which was severe in the agrarian districts, the Centre believed that it was bound to go over completely to the Agrarian camp. It felt sure it could hold the industrial districts of this party through championing a material increase of the industrial duties. Gradually, however, the factory laborers have come to realize more and more clearly the danger of a considerable increase in the cost of living with which the new tariff threatens them. In many places in the Rhineland and Westphalia they are already demanding the setting up of anti-Agrarian candidates, and it is only a question of time when this movement will extend to other industrial communities also. Certainly, as long as there is still prospect that the reciprocity treaties will be concluded which favor the export of many manufactures, or at least assure the present volume of exports, it will assume no larger dimensions. It would, however, immediately swell like an avalanche as soon as this prospect

vanished, and then, in order not to lose support from the Social Democracy, that part of the Centre's representatives which has its voters in the manufacturing communities would have to go over to the side of the tariff opponents.

And then, too, the position of the future opponents of the tariff in the Reichstag would be considerably stronger than it is now. As soon as the prospect of good tariff treaties disappears, it would be certain that the Social Democrats in the election appointed for the middle of June would make brilliant gains.

And, furthermore, the alliance between the Agrarians and the protectionist groups of industry (especially the heavy iron and textile industries) would then break up. For, as far as industry is concerned, the alliance rests on the assumption that, in spite of the increase of agrarian duties and the fixing of minimum duties for grain, the export interest of industry will be conserved as heretofore.

If the ministry should come out empty-handed, or with a tariff treaty only with Belgium, it would then have on its side only the right wing of Conservatives and a part of the Free Conservatives and Centrals and a few National Liberals. In such a case they could scarcely do anything else than repeal the December tariff, which a great majority supported only because they wished to provide the ministry with better weapons for negotiation.

The ministry has prudently not served the notice of terminating the reciprocity treaties negotiated up to the present time. It has, furthermore, reserved the right to determine the date at which the new tariff shall go into effect. It can postpone it *ad calendas graecas*: in case it does not go well with the new tariff, it can attempt to reach agreements on the basis of the old tariffs or prolong the present ones.

It seems to me that the long contest will end in the latter way,—much ado about nothing. And I hope that

the result may be such that the tariff wall of Germany, which is already high enough, shall not be suffered to rise any higher.

## II.

Tariff questions are questions of might. The several occupations and parties do not trouble themselves about general interests. Each takes its position in tariff controversies according to its special interest.

Science is neutral, or wishes to be. It seeks the solution which answers to the public welfare. How, then, does German science regard the present problem?

During the second third of the nineteenth century the great majority of our scholars were a unit upon the proposition that freedom of foreign trade was the normal, or at least the ideal, condition. Its limitation, in the form of protective duties, was justified only temporarily: —

(a) Above all, to nourish infant industries. Friedrich List\* had found almost universal acceptance for the theory that for a people yet in the agricultural stage a protectionist interim is unavoidable: without it they would not be able to attain the higher stage, which is worthy of the effort it costs, and they would be obliged to renounce the harmonious development of agriculture and manufactures.

(b) Further, in order to help a useful branch of industry over a temporary distress, resulting from a sudden disturbance of international conditions.

(c) Finally, in order to bring back to reason other countries which threaten to injure us by their tariff policy. In short, the doctrine prevailed that every protective duty should justify itself either as an educative, or emergency, or retaliatory tax. As for the rest, "Hands off!"

Down to 1860 a great deal of convincing force dwelt in the theory of List, which established the most important

\* F. List, *Nationales System der politischen Oekonomie*, 1842.



exception to the principle of *laissez-faire*. British manufactures were far superior to ours in most departments, equipped with more perfect machinery, with more highly skilled labor, with cheaper capital.

Gradually, however, England's advantage diminished. Many branches of our industrial activity became the peers of those of Britain. From a good customer, Germany became a serious rival of the Island-Kingdom. Thus the postulate of educative duties, though indeed retained in theory by most of the text-books, lost in practice more and more of its significance. And, furthermore, as neither the situation nor the customs policy of other protectionist states furnished a protectionist motive, the Manchester School found among us constantly more disciples, among statesmen and business men as well as professors.

Nevertheless, about 1875 two factors arose which swelled the protectionist ranks to overflowing. The first was the critical position in which German manufactures found themselves. The rapid development which they had enjoyed after the French war, as a result of the indemnity payment, was followed by a long period of depression. Immediately after the crash of 1873 foreign, and especially British, competition made itself only slightly felt: the low level of prices kept them away from us. When, however, the first pressure had passed by and prices began to rise, England entered upon an economic ebb as a result particularly of a series of bad harvests. Since the purchasing power of her agricultural class was so much reduced, large quantities, especially of iron and textile wares, had to be sent abroad. Thus the tendency of the German market towards a rise was hindered by the dropping of the English market. This circumstance aided admirably the protectionist propaganda, which of course, in spite of the victory of the free-trade people, had remained ever active. Above all, the smelting and textile industries called for greater protection. Ger-

man industry, it was said, should not be permitted to suffer through stagnation of business abroad. Through the raising of the tariff wall the danger of a repetition of the sudden flood of foreign manufactures should be more securely guarded against than formerly.

The second factor was the critical situation, which did not yet, it is true, confront our agriculture, but might be expected with reasonable assurance in the future; *i.e.*, the more and more sweeping invasion of trans-oceanic and east-European grain. As long as Germany exported more grain than she imported, the country party had been thorough Manchesterists in their theory. Now, however, when the previous situation threatened to be reversed, the agriculturists united with the manufacturers, whose opponents they had formerly been, and, energetically supported by Prince Bismarck, carried the tariff of 1879.

The professors joined in this change of attitude, avowing the belief that Germany under the existing circumstances would have to give up free trade.

Only a few, particularly Nasse, remained true to the old flag, saying that manufactures no longer needed the protection which formerly they had rightly received for their early encouragement. No one should let himself be deceived by the temporary pressure from the other side of the Channel. It was wrong in principle to undertake to guarantee to the landlords their present ground rents. It was true that thus far those landlords had asked little (only a duty of one mark for grain), but in the future they would ask more and more. Therefore, the correct policy was *principiis obsta*.

Others, like Conrad, preserved a sceptical attitude towards the increase of industrial taxes, but acknowledged the temporary need of agrarian duties. By the according of a moderate grain protection, they thought, the agriculturists would be enabled, without undue haste, to turn from the raising of grain to other less threatened branches of

production. The security that this would so turn out (namely, that the favor of the nation would not be misused in such a way that the landlords should remain in the old ruts) could only be secured if protection were accorded for a limited number of years, in the course of which it should be diminished more and more: higher duties at first, then gradually lower, finally free trade again.

This course, in my opinion the correct one in principle, was not followed by our law-makers. Agricultural as well as manufacturing duties were placed in the tariff without time limit. While the manufacturing duties, as compared with the duties of 1879, were not considerably increased, the agricultural duties verified the proverb that "appetite comes with eating." The moderate duty of 1 mark on grain was increased to 3 in 1885, and then to 5 in 1887, an exceedingly high rate, equivalent to a levy of 30 to 40 per cent. of its value.

Such a trade policy, aiming to maintain a high ground rent for the landlords, kept down the standard of living of our laborers; for it forced them to eat more costly bread than their English brethren. This trade policy stood in remarkable contrast to the social policy of our realm, so inclined to favor labor and so urgently favored and supported by our economists. But at that time this contradiction was hardly appreciated, for soon after the passage of the new grain bill of 1887 a boom set in. In spite of the fact that the cost of living was higher than it would have been under free trade, the economic condition of the "fourth estate" was improved. Therefore, only scattered voices from academic circles were heard in opposition.

Furthermore, economic science hardly took part in the contention over the Caprivi treaties. So far as can be judged, it assented, or rather the majority of its spokesmen, to the reduction again of the grain tax, which brought about the agreements with those other grain exporting states. Shortly after the conclusion of these treat-

ies, another boom set in, which lasted until the end of the century. (See page 370 above.) The grain duties, although moderated, were still quite high; but the cost of the necessities of life remained exceedingly low for a long time. After 1898 they rose again; but, since at the same time prosperity was at its height, wages rose in at least equal measure.

As long as this situation obtained, which satisfied the agrarians as well as the manufacturers, the *entrepreneurs* as well as the laborers, science troubled itself but little with the questions of trade policy. Such differences as there were remained latent. That such contentions existed did not appear till the ministry came forward with the tariff proposition of 1901, according to which the tariff was to be raised higher than ever.

At present three tendencies are clearly discernible:—

1. A tendency which professes the principle of protection, and which has overthrown the formerly prevailing doctrine of free trade as the normal, or, at least, the ideal state. This tendency is divided into two groups:—

(a) The first section represents the demand that all branches of national labor which operate under more unfavorable conditions than their foreign competitors shall be accorded a protective duty, the height of which is to be so fixed that the difference of the cost of production will be compensated. All branches of national labor should be secured from the danger of shrinking or disappearing as a result of the invasion of foreign commodities. What has been produced hitherto should also continue to be produced in the future. The competitive industry from without should not be allowed to injure the *jura quæsitæ* of the home agriculture and manufactures. The consumer, in the interest of the maintenance of national labor in its *status quo*, must adjust himself to this system of general permanent compensatory duties. "The consumer never has the right to obtain his goods at a price which does not

cover the cost of production," lately remarked a representative of this group. So far as foreign competition prevents the native producer from clearing his expenses, it must be barred out.

This is the Vulgate of the protective system. It is the conception of the protectionist dogma, which has everywhere and always found supporters and still finds them. It has recently been formulated for them again, as sharply as can be imagined, by the late Thomas Brackett Reed, in an article in the *North American Review*, 1902, pp. 751-753. He says:—

Protection is no medicine, to be dropped as soon as possible. . . . It is food. The medicine notion comes from the early arguments for the selection of infant industries to be fostered and cherished. Time and experience have enlarged the notion of protection. . . . They have shown that protection is not a privilege, but a system. A privilege might be robbery. A system must justify itself by results. The principle which underlies protection is the securing at all times to the American people the markets of America. All the work of the nation shall be done by the people of the nation. . . . Any system which enables our people to do our own work is the system which can give, and has given, the best results. . . . Protection is justifiable because it is of general application. The whole nation gets the benefit of it.

*Tout comme chez nous.*

Among us, too, List's medicine theory of the protection of infant industries has yielded in favor of the food notion, according to which the protection system is of general application. Like that German professor whom I have just cited, Mr. Reed, in another connection, urges that "destructive competition is an evil: the world cannot afford to have a trade which does not give a fair profit" (p. 748).

But in the case of America a whole party acts on that dogma: among us only a small number swear fealty to this canon.

(b) Far more influential is the second section, which

desires the system of compensatory duties, not as general and permanent, but only particular and temporary. They would continue them, it is true, for an indefinitely long time, under some circumstances for all futurity. This group, which honors as its leader Wagner, the famous Berlin economist, is concerned quite exclusively for the protection of our agriculture. To that end the further development of Germany as a manufacturing nation should be prevented, or at least its rapidity checked. That is to say, this group fears that a nation ever exporting a greater amount of manufactured products, and importing an ever greater amount of necessities of life and raw materials, will fall into a constantly more precarious situation, becoming more and more dependent upon the nations, which would be not only its customers, but also its purveyors. A more intimate interdependence of the national agriculture with national manufacturers should be sought for. Germany must once more become economically self-sufficing.\*

A few of this group content themselves with demanding only that the further decline of German agricultural production be prevented. Others, on the contrary, demand a restoration of it to such a point that Germany shall at least raise the provisions which she herself needs; that is, "shall keep under the protection of her guns the ground upon which her grain grows and her cattle graze."

While the first section cherishes the principle of the "parity of agriculture and manufacture," the second regards agriculture as far more important, as being to their minds the one with which the national interest coincides. Many wish, presumably, in the bottom of their hearts for a general reduction of protection to manufactures, not merely on such implements as form cost elements of agriculture (such as machines), whose cheapen-

\* For the reasons advanced for the self-sufficiency policy, see the discussion under heading III.

ing would be for the advantage of agriculture. If the English, Belgian, Swiss, and American competition should cause the contraction of certain branches of our manufactures, labor would be set free for the use of agriculture. The agricultural wage would diminish, and an impetus would be given to the expansion of domestic agriculture. They do not publish this desire, of course: they express it only in secret; for to stand for lower manufacturers' duties would be to risk the loss of their industrial allies.

The tariff of 1902 was greeted by this section, as well as by the first, with joy. Only to their minds it did not go far enough in the direction of agrarian protection. They are not exactly hostile to a continuation of the treaty era. But if, as a result of the fixing of minimum rates for grain or as a result of some other hindrance, new agreements are not perfected, this outcome of the tariff contention would suit them better than to see agriculture again "sacrificed" to industry, as was done in the Caprivi treaties. The possibility of a treaty-less condition frightens them as little as it frightens the Agrarian party. "The tariff," says one of their champions, "is a weapon useful either in negotiation or for tariff warfare." And if, in the latter event, our export of manufactures falls off, our agriculture will profit in consequence. The higher the duties of foreign countries upon German manufactured products and the higher the German duties on foreign agricultural products, the surer is it that the great object of self-sufficiency will be attained.

The American protectionists seek two irreconcilable objects, the retaining of the home market for manufactures and the gaining of further foreign markets for the farmer. They do not understand that to buy less manufactured goods from foreign countries is to sell less food products and raw materials to them. Our advocates of self-sufficiency see more clearly. They know that the reten-

tion of the home market for the farmer is not possible without the renunciation of further gains of foreign markets for manufactures. They know that a falling off of agricultural imports must bring with it a falling off of manufacturing exports, but this consequence they readily accept. Your protectionists are still floundering in the great error of Mercantilism. Our protectionists are a little more modern. They are rehabilitating again certain grave mistakes of the Physiocratic system.

That is the quintessence of the wisdom of our anti-industrialists. Economic activity should be founded upon the solid rock of national agriculture instead of upon the quicksand of export industry. With arguments precisely similar to those first advanced by Quesnay's school against Colbert's regime, this group combated Caprivi's régime, which is alleged to have disregarded the true welfare of the nation, determining the tariff problem with sole reference to the industrial or mercantile interests.

As in the time of the corn-law struggle (when Physiocratic doctrines had their first renaissance in the theories of the British landlords) the anti-industrialists protested that, in the case of the victory of the Manchester party, England would lapse into a constantly more oppressive slavery to the countries which furnished her with food, so to-day among us (since, in spite of the duty, agricultural imports have hitherto steadily increased) the wail is heard that "Germany will be reduced to a nation of dependents," that she is already groaning under a "latent foreign domination" which will of necessity make itself felt even more severely in the future unless deliverance is attained by means of a substantial increase of grain and cattle protection,—domestic politics instead of world politics.\*

\* Compare the book written shortly after the repeal of the corn laws by Ledru-Rollin, *De la décadence de l'Angleterre*, 1850, vol. iv. The biting, malicious criticism which this collectivist, strongly influenced by the Physiocratic doctrine, showers upon the industrial evolution of England, reaches its climax



2. Between this tendency favoring a reactionary or at least stationary policy and the progressive school (discussion of which we will defer to the end) stands a group of scholars who occupy a middle position. Schmoller and Conrad belong here.

The Historical School, of which Schmoller is the leader, has always denied the possibility of an absolute solution of economic problems (as I once expressed it, the system of absence of system); and according to it "the tariff problem permits of only a relative solution," which must be determined according to the concrete conditions, and allowances made for place and time. Here free trade, there protection, meets the real needs and powers of a people: at one time it is advisable to open the gates wider, and at another less widely.

Regarding the concrete situation of Germany at present, Schmoller favors raising again the agricultural duties reduced in 1892-94; for, while he is careful to deny the usual exaggerations of the self-sufficiency advocates, he still believes with them in the existence of serious and far-reaching agricultural distress. Under these circumstances it is the duty of the State to help the weak: if the tariff wall is not raised, part of the German grain producers will be ruined. Duties on bread-stuffs to the amount as fixed at present, instead of the earlier considerably higher minimum duties, are, as he thinks, questionable. This is true also of cattle and meat duties. He goes part way with Wagner's party; but, while inclined to approve the

in the ejaculation "*nation subalternisée, vassale de l'étranger.*" "Russia and the United States," he said, "do not need to attack England at all: if they only close their ports while England begs for bread, it will be all up with the latter." Incidentally, he it remarked: To-day the Physiocratic doctrine enjoys a second renaissance, not only among us, but also on the other side of the Vosges and of the Channel. Like the partisans of M. Méline, the British and colonial agrarians are also working for an imperial federation, for the favoring of grain from Canada and other colonies, with Quesnay's argument as to the uncertainty of food products from abroad. Both the former and the latter dangle the spectre of a threatened dependence upon "foreign bread lands."

"drag-net" system of protection for agriculture in general, he disapproves the high protection of fodder. The international situation requires particular encouragement for our grazing industry. Its corn, oats, and barley ought not to be made more expensive.

The extreme agrarians want to have all agricultural products burdened more than now, so that all classes of agricultural people will feel a community of interests in regard to the tariff. Schmoller places the interests of the farmers who are the mainstay of cattle-raising higher than those of the landlords, who for the most part raise bread-stuffs and fodder. Bread-stuffs duties he is willing to discuss, but only "when they do not make the price of provisions too high." The demand for higher duties on cattle and meat he makes without that modification.

The chief difference between him and the partisans of the *Bund*, particularly the academic anti-industrialists, consists in the fact that the latter hope for rather than fear an era of tariff warfare, while Schmoller approves the December tariff now under consideration, only upon the condition that it shall not create a hindrance to the conclusion of the treaties like the past ones. With this tendency favorable to treaties, he approaches the position of the progressives, but in contrast with them, since they are pessimistic as to the possibility of bringing about such treaties on the basis of this tariff, he believes that the considerable increase of agrarian as well as industrial protection determined upon December 14, 1902, signifies not only no hindrance, but is rather a *conditio sine qua non*. "For to-day the world is in the midst of a phase of neo-Mercantilism."\* Russia and the United States have fallen into a high protective system of the worst kind, a régime "vaunting its might and power." In the face of this existing condition in the world of tariff politics every State is obliged to encase itself for defence

\* In the case of France, Italy, and Germany, we must, as we said above, speak of neo-Physiocratic policy.

in an effective armor of duty. To-day there is being formulated a considerably higher general tariff which constitutes the "indispensable bridge" leading to the rational peaceful *modus vivendi* with our bad neighbors. *Si vis pacem, para bellum*.

By clothing herself in a far heavier coat of tariff mail, Germany gains an "international weapon," by force of which she will more surely bring to reason those peoples who have fallen into the mania of high protection than if she were to enter the field of battle with the light weapons hitherto used. "Only in case Germany should raise materially her duties, in order to abate them later on in accordance with the attitude subsequently taken by other negotiators, will she be able to fulfil the duty set by concrete conditions; namely, to fight neo-Mercantilism by means of treaties, and to establish a reasonable means of equitable and just trade policy in the world of international intercourse. From this standpoint I approve the idea of a higher bartering tariff, if by its use good treaties can be secured."\*

Conrad stands nearer to the progressive tendency. This leader of the Halle school refuses to assent to a raising of the tax on bread-stuffs, by means of which, as Schmoller says, "one can drive a bargain." Conrad protests not only against the raising of the duty on fodder, but even puts himself on record as in favor of its reduction and, if possible, abolition in the case of oats. Only for cattle and cattle products should a more effective protection be guaranteed. "Here is already recognizable a strong upward movement, and results can therefore be confidently expected from the stimulus without injuring the community very much."† Lard and bacon, however, he excepts. The lower classes ought not to have

\* Schmoller, *Rede auf dem Congress des Vereins für Socialpolitik*, September 24, 1901.

† Conrad, *Die Stellung der landwirtschaftliche Zölle* (Schriften des Vereins für Sozial-Politik, 1900, Band 90).

their standard of living depressed. Schmoller entertains this misgiving only as to the duty on bread-stuffs.

While Schmoller has not spoken distinctly and clearly any further on the cardinal question of the tariff controversy,—namely, whether the broader development to the position of an industrial state is to be checked or not,—Conrad distinctly declares that for our increasing population to procure adequate employment, and to raise the well-being of the whole country, which agriculture cannot in the same measure bring about, German manufactures “are to be maintained at their present position, and, if possible, a further expansion brought about.” In the interests of manufactures the former course of trade politics should be continued. No minimum tariffs for grain should be laid down, for such a concession would only be secured at “the cost of an excessive sacrifice of manufacturing interests. The interest of German agriculture is not the only thing to be considered; but, above all, one must take into consideration the concessions in the treaty negotiations, what concessions, for example, would have to be made to induce foreign countries to make concessions to our industrial products.” Furthermore, Conrad declares with emphasis that even moderate agricultural protection is justifiable only as a transition step.

Thus he energetically opposes the advocates of self-sufficiency, who consider alone the interests of agriculture, who not only wish agricultural protection to endure for a length of time that cannot at present be foreseen, but also under some conditions (in case the future of the trans-Atlantic and east European competition should become keener) that it should be increased more and more.

You see the attitude of our science with respect to the tariff controversy appears in every possible form. The reactionary group, as far as it affirms the system of general permanent compensating duties, bears a close relation to Mercantilism; as far as it is hostile to manufacturers, it is

related to the Physiocrats. The moderate position has, in Schmoller, a representative of the *fair-trade* principle, in Conrad an adherent of the doctrine once prevalent among us of free trade as a rule, and protective duties as the exception.\*

And, finally, now there is

3. The progressive tendency, which includes in its ranks two scholars of the first importance, Schäffle and Brentano,† and which follows, though still somewhat cautiously, the footsteps of the British free traders.

"In the present stage of development of Germany the real protection of national labor is free trade" (Brentano). "In the long run neither agriculture nor industry can be made healthy by tariff increases" (Lotz). This position does not require that the present protection should at once be laid aside; for in this way our activity might suffer a set-back, and capitalists, *entrepreneurs*, and laborers in those branches to which the sweet poison of protection was formerly accorded would be subjected to severe hardship. It only demands that in the future the tariff wall shall not be built up any higher, but that it be gradually and cautiously pulled down. If this demolition of the tariff wall is accomplished by means of treaties, according to the principle *do ut des* so much the better. Of course, it is naturally to be preferred that Germany should reduce her tariff bulwark move by move; that is, exchanging each duty removed on her own part with an equivalent foreign duty removed.

But while those of this position are decidedly inclined to work for the continuation of Caprivi's course, they do not share in the conviction that the right means to the

\* Conrad justifies the raising of cattle duties as being an educative measure (that is his meaning when he speaks of *stimulating*), and the retaining of duties on food-stuffs by appeal to the critical condition of agriculture.

† A. Schäffle, *Votum gegen den neuesten Zolltarifentwurf*, 1901; *Gefahren des Agrarismus für Deutschland*, 1902.

Brentano, *Das Freihandels-argument*, 1901; *Die Schrecken des ueberwiegenden Industriestaats*, 1901.

end is to increase the general tariff with a view to procuring more from other states by conceding more. And, furthermore, they do not accept the principle of *do ut des*. Foreign concessions are to them no absolute prerequisite for Germany's progress on the free trade road. Even if other states cling tenaciously to the former amount of protection, it is held that this step is still expedient. It is believed that Germany would only hurt herself by a policy of refusing to lower her protective walls because foreign countries are foolish enough to believe in the blessing of Chinese walls.

The reactionary tendency desires tariff duties only if agriculture does not again, as in 1892-94, have to foot the bill. It is anxious that Germany should make herself self-sufficing in the matter of the necessities of life, even if it has to be accomplished at the cost of a tariff war. The progressive tendency wishes that the development of Germany to an industrial state shall continue further, that this development shall still be promoted (but without over-doing), either through tariff treaties, like most of the former, or through the spontaneous independent removal of duties. It wishes our economic life to be more and ever more closely identified with that of the world. For the stronger manufactures become, and the more the territorial division of labor between our country and other lands is perfected, the more will the material welfare of Germany increase.

Upon what grounds this position rests I will consider below. If I formulate the arguments as I myself deem them correct, it is because I believe that I voice in essentials the thought of all those who believe that regard for public welfare requires a free trade policy favorable to manufactures.

## III.

Every tariff controversy of any importance, on the one hand, revives, by its own significance, the whole array of arguments of a general sort with which the partisans of protection and free trade have attacked one another from time immemorial; but, on the other hand, certain arguments directed to the concrete situation will be brought into the field.

1. We cannot here enter into the grounds of a general sort. To expound at length the reasons why I defend the free trade principle is precluded by the limitation of space set upon my article.

But I should like to refer only to a single point, and that in connection with the above-mentioned article by Mr. Reed, which so concisely represents the traditional protective doctrine, when he says that "securing at all times to the American people the markets of America is the system that can give, has given, the best results. . . . The whole nation gets the benefit of it."

At the beginning of his article he says, however, that the paramount principle of all economics must consist in the introduction of labor-saving machinery. "Upon such invention and use depends the whole material progress of the world." To that statement I fully assent. It is, however, in strongest contradiction to the protectionist dogma: it is in fact the logical negation of it. For "all the work of the nation to be done by the people of the nation" means nothing else than the contrary of labor-saving: it implies waste of labor. If I am against the protectionist system, it is first of all because the territorial division of labor which results from free trade operates like labor-saving machinery. To pull down the tariff wall is to reduce the national cost of production, and to derive a greater total product from a given expenditure of labor and a higher national dividend

than formerly. Therefore, it is true of *free trade* that "the whole nation gets the benefit."

To be sure, if our gates are opened wider for foreign competition, certain branches of national activity—such as have a higher cost of production than their rivals in foreign lands—will shrink, perhaps even be destroyed. But this action—unfavorable to the special interests of the several *less productive* branches—is in the interest of the nation at large, as increasing imports lead to increasing exports,—*acheter c'est vendre*. The more productive branches at the same time will better their chances. A shifting of labor with the effect of labor-saving will be the result.

"All good progress," says Mr. Reed, "has its temporary sorrows. . . . Displacing the old with the new is never without its complications and minor evils, which correct them[selves] in due time." He says this of the introduction of machinery, but it is just as true if breaches are made in the tariff wall. "Displacing the old branches" (which decline with increasing imports) "with the new" (which expand with increasing exports) "is never without its complications and minor evils"; yet even these "correct them[selves] in due time." A final result is here also a good "progress" as the result of labor-saving.

Merely upon this ground I should dissent from the new course. A tariff which is drawn up with the idea of compensating duties, which designs to maintain such branches of German industry as have a higher cost of production than their foreign rivals, will not make our people richer, but poorer than they might be.

2 As concerns the arguments directed towards the concrete situation, which have been brought forward in favor of raising the tariff law, they are separable into two main groups.

(A) Wagner's group (as well as the Agrarian party which defends itself with the doctrine of this group)



urges higher agricultural protection as a preventative against certain dangers which lurk in the development of Germany during the next few decades to an industrial state,—a development which has been accelerated by the Caprivi régime. They are of the opinion that, if that development is not checked, our economic life will incur a double risk. First, those lands which to-day buy our manufactured articles will take production into their own hands sooner or later. Second, those lands which now furnish us with food and raw materials will sooner or later cease to sell them, and will work up their own materials as a result of increased industrialization, and consume their own bread as a result of increasing population. For a while this territorial division of labor (between us and those nations which are at present our customers, as well as our purveyors) might subsist, and, perhaps, even become more intensive. But, ultimately, this arrangement will be broken up, and industrial development will decline, and thus serious calamity will break in upon us.

What a depreciation of capital and what an amount of unemployment, when once our industry is excluded from foreign markets! What misery when sometime bread-stuffs and meat, wool and cotton, iron and copper, shall become restricted! What ignominious tyranny threatens us from the raw material states, which will exact an exorbitant price from us for their food and materials, and will be able to beat down our manufactured products to ruinous prices!

For this reason manufactures ought not to be allowed to progress any further, and timely care should be taken that the production of raw materials of Germany shall not dwindle still further. To continue on a course which will surely only end in a *cul-de-sac* is utter folly.

In answer to those arguments the following may be said:—

Supposing that in the future the industrial development

of the state should be retarded, the result would not be nearly as bad as the morbid fancy of this group conceives. For this process would be accomplished very gradually, and would cast its shadows far in advance, so that men would be prepared for it. Only gradually could our customers accomplish their industrialization and the increase of population of our purveyors come to pass, and as gradually would our production of raw materials be forced to expand again.

I need not dwell longer on this point. It is more important to emphasize that it is exceedingly doubtful whether that process is likely to take place at all. At this point, however, a distinction must be made. One of those two dangers with which the anti-industrialists seek to frighten the public does not exist. The other danger exists, perhaps,—indeed would exist, even if Germany should desire to make herself “self-sufficing.”

(a) That the growth of industry in the present raw material states must bring about the shrinkage of our export of manufactures is a mistake. Is it true that, as was once feared, the exports of manufactures of France and England—that is, the old industrial states—declined, as Germany, Switzerland, Belgium, and the United States gradually engaged in manufactures? Not at all. These new manufacturing states turned to other export articles than the former states. Not destructive competition, but wholesome differentiation of nations; not gradual decline, but gradual growth of exports,—has been the result of the extension of industrialization. The new industrial states have become better customers to the old than formerly, when they furnished only the raw material. An enormous proportion of total trade in manufactured articles takes place between the old and the new industrial States, as, for example, between the purely industrial States and the agricultural-manufacturing States of the Union, where in the days of trade jealousy the mother country most

earnestly strove to prevent the manufacture even of a nail.

Why should the result in the future be any different? Why should the decline of our export industries, taken as a whole, set in, in case Russia, Canada, Central and South America, eastern Asia, Cape Colony, and Australia should develop manufactures at some future time? If to-day a more extensive division of labor is taking place within the industrial realm, and a comprehensive interchange of products between countries like England, France, Germany (that is, lands all of which lie in the temperate zone, all on about the same plane of social and economic development), is it not probable that such a division of labor and such intercourse will not only continue, but extend even further, when it includes not only the industrial states of to-day, on the one side, but Russia and others, on the other side? For between the former and the latter there is a much greater diversity of natural as well as social and economic conditions than exists between England, France, and Germany.

Not less, but more, only in part different, products will be sent by the industrial states of to-day to the states of the raw materials after their industrialization shall have been completed. What will these products be? We cannot answer that at present, any more than in 1830 or 1840 could any one have told in what way the division of labor and the trade between England and Germany would shape themselves after the latter had entered the ranks of industrial states.

It is an old error into which Wagner's group has strayed,—the mercantile error of the lack of harmony in the economic interests of peoples. Hume refuted it in his famous Essays:—

The more the arts encrease in any state, the more will be its demands from its industrious neighbors. The inhabitants, having become opulent and skilful, desire to have every commodity in the

utmost perfection; and, as they have plenty of commodities to give in exchange, they make large importations from every foreign country. . . . It is obvious that the domestic industry of a people cannot be hurt by the greatest prosperity of their neighbors. . . . Where an open communication is preserved among nations, it is impossible but the domestic industry of every one must receive an encrease from the improvements of the others.

Only a readjustment would be necessary for the export trade of Germany if Russia and other countries should become industrial, but no decrease of the total of manufactures exported.\*

(b) But it is somewhat different as to the danger that food supply and raw materials may become scantier. Unquestionably, this possibility lies in the far distant future. In Europe itself there are lands enough which could increase enormously their power of furnishing a surplus of raw materials,—above all, Russia and the Balkan States. And Siberia, India, Mesopotamia, the north coast of Africa (once a rich region, now dried up like the land between the Euphrates and Tigris only as a result of the decay of the irrigation works), Argentine, South Brazil, Paraguay, the Cape, and “last, not least,” Canada and the United States.

In these places the increase of population can go on for an indefinite time without causing Germany and England any anxiety. On the contrary, the surplus of production over needs would go on still further in those quarters of the globe if population should increase. For everywhere there is still a lack of labor, and everywhere the cry is that the scarcity of hands does not admit of fully taking advantage of the existing resources. Down to the present time, in spite of the great increase in the number of people which has taken place in the United States, etc., in the course of the nineteenth century, the total of food products has grown much faster than the total of consumers;

\* Cf. my *Weltwirtschaft und Volkswirtschaft*, 1900, pp. 66-68.

and, consequently, exportation from these regions to western Europe has hitherto steadily risen.

The contention variously expressed among our pessimists, that the period of the *extensive* opening up of the world is coming to an end, is absolutely false. The bread-yielding area can yet be incalculably extended. Furthermore, through the *intensive* working of fields already under cultivation an enormous increase in the net yield of food-stuffs would result. In the future the springs of nourishment will flow more liberally than heretofore, and this not in spite of, but because of, a further increase of population.\*

However, no one will deny that the "interregnum of superabundance of food" (Oldenburg) will ultimately come to an end. As population grows to larger and larger proportions, the law of diminishing returns must gradually set in, in more countries, as has been the case in western Europe for generations. Continually, more countries will be put out of the position of supplying the industrial states with food, as in the past.†

When that time is to come is an uncertain, obscure matter. That it *may* come some time is undeniable. But, admitting this, there is no argument for a policy of national self-sufficiency, and against the "cosmopolitan export policy" (Oldenburg) followed since 1892-99,—for the danger that the sources of nourishment will gradually fail is fully as imminent for the self-sufficing economic unit as for one involved in the net of the world's commerce, importing food and exporting manufactured products,—this danger threatens an harmoniously developed agricultural and manufacturing state as much as a one-sidedly developed industrial state.

A people drawing its nourishment from the national

\* *Weltwirtschaft und Volkswirtschaft*, pp. 101-103.

† I am not going any further into the question of the decline of imports of raw materials (agricultural and mineral products). Its place is so important that that question does not differ from that of food-stuffs. Moreover, it plays only a secondary rôle in the plea of the Wagner people.

soil, in the event that the number of consumers increases faster than means of subsistence, may experience a bread famine as easily as a federation of people among whom one group produces the food and another carries on the manufactures.

(c) But, assuming that I may have been wrong in the answer brought forward, even then I would oppose the new tariff; for those dangers could not be avoided by means of higher agricultural protection.

The Wagnerites suppose that to burden bread-stuffs, etc., more heavily will work an expansion of our agriculture, or at least will assure the maintenance of its *status quo*,—in any event, “retarding” the development of Germany towards industrialism. I deny, however, that such a result is to be expected.

Wherever there is still much land lying fallow, higher protection, on account of the rise of prices and increase of rents which it brings about, will not only enhance the value of the land already occupied, but will also give an impulse towards taking into cultivation lands hitherto unoccupied; that is, it will advance domestic farming. Among us, however, well-nigh every arable acre has been taken under cultivation.\* Since this is so, the higher agricultural protection will surely raise the rent of the producers; but it will probably have no effect as a stimulant of production, constituting in the long run, at least, no hindrance to the further development of manufactures.

For, as long as the value of land rises in harmony with the higher protection, and prices and rents rise with it, our agriculture will remain exactly in the same relation to foreign competition as to-day, when the duty is lower, but in consequence prices and rents also lower. For an indefinite time, *until* the increase of land values is generally accomplished (and this will not take place over night), our productions of bread-stuffs may receive an impulse,

\* Upon this see my *Sozialpolitik und Handels-Politik*, 1902, pp. 53, 54.

the "national" agriculture may attract labor and capital, and may leave the "cosmopolitan" export industries deserted. But, *after* the costs of producing agricultural crops shall have been raised all around to correspond with the increased value of land, the ability of our agriculture to compete in our home market will be no greater than previous to the raising of the agricultural duties.

Then foreign farm products will compete as effectively as to-day. Then domestic production will have to take back the step which it took forward. Since the increase of land values must neutralize the raising of agricultural duties, sooner or later the importation of farm products will flow in anew, in spite of the higher burden. At the same time the exports of some branches of manufacture will be increased in payment for these foreign imports. In other words, the development of Germany to an "industrial state" will begin anew.

*In the long run everything remaining as originally!* The farmer will only be enticed to an increase of his production, which will later prove a source of loss. The clamor of the present will have been hushed only to arouse the same complaints in the future.

Only as agricultural protection is continually increased, and as (with every increase of land values resulting) further protection is resolved upon in order to check the threatening flood of imports, can the expansion of agriculture, or even the maintenance of the *status quo* be assured, and the ultimate expansion of manufactures be checked. In other words, only as conscious socially and politically questionable advancements of rent are continually adopted, and as the distribution of wealth remains continually disproportionate!

I do not know whether Wagner and his followers are aware of this consequence. To me it is conclusive against the system of "readjustments without end," as Brentano has very significantly characterized them. If Germany

accepts the new tariff, with its materially higher duties, it will only be able to call a halt to further industrialization by following it up after a while with a still higher tariff. It is possible to stimulate domestic agriculture by means of protective duties only on condition that a continually higher tribute is imposed upon the mass of consumers for the benefit of producers.

This ought not to be. We who are to-day fighting the same battle in Germany which Cobden and Bright fought in England want no such increase of rent at the expense of wages.\*

We desire that the trade policy of our country shall not subserve the interests of the minority, but "the greatest good of the greatest number." Professorial agrarians, it is true, have no intention of injuring the interests of the working classes. They regard the increasing burden upon grain as a fatal necessity imperatively demanded in the interest of the nation. This necessity exists in their minds because they are hypnotized by those two dangers, the first of which (the difficulty of marketing our wares) is, as we say, a delusion; while the second (the difficulty of supplying our people with food) truly does exist, but exists whether Germany continues on the highway of industry or in the future supplies herself with food.

(B) The group of which Wagner is the head, and with them the adherents of the *Bund* and the Conservatives, justify on future considerations (a future which they have made out of whole cloth) a much more forcible protection, especially agricultural protection, than the December tariff provides. On the other hand, Schmoller and his followers, and the government, too, in certain respects, on present considerations, justify for Germany the material raising of her general scale of duties.

Whereas the former wish that the December tariff shall

\* On the special question of the influence of grain duties on wages, see my essay, *Kornzoll und Socialreform*, 1900. On the general question of the influence of the protective system on wages, see my essay, *Produzenten-Interesse der Arbeiterklasse und die Handelsfreiheit*, 1903.



actually go into effect (at least that the increased agrarian duties shall be fully adhered to in the pending negotiations for treaties), the latter look upon the December tariff as a provisional measure, as a mere bargaining tariff. What items shall remain, what items will have to be reduced, will appear in the course of the diplomatic negotiations. According to circumstances, larger or smaller concessions will have to be made as well in the case of duties on manufactures as on the unfixed agricultural duties.

The former are in bitter earnest, the latter are only manœuvring. They contend, since other nations, particularly Russia, France, and the United States, pursue a policy of exclusion, that we must at least act as if we were determined to raise our tariff wall. Only then can we hope that our neighbors will be persuaded to deal satisfactorily with us in tariff negotiations. The present tariff is too low to guarantee us the "weapons" which a consideration of the concrete situation demands.

I regard these arguments as in no way conclusive, and I expect little from the tactics founded upon them.

Let us consider the consequences.

One result is assured. With such increased tariffs the protectionist appetite is whetted, though it is well known that at best it can only be partially satisfied. This whetting of the appetite may lead to very unpleasant surprises, even though the ministry has ever so often insisted that certain increased duties were to be regarded as "compensation material." When later on the reciprocity tariff, with its rates lowered in many instances, is brought into parliament, it may turn out that protectionist opposition will be encountered, which will be far stronger than before the raising of the general duties. During the time intervening between their publication and the discussion of treaties the internal situation may have appreciably changed, so that certain interested groups may have become powerful, while pretending to know nothing of

the fact that the rates which concerned them were only raised that they might be lowered again; and they will cry out bitterly against the ministry because of its too ready compliance. The minister of commerce will then be in the unfortunate position of lamenting, with the pupil of magic in Goethe's poem, "Die ich rief, die Geister, werd' ich nun nicht los!"

In the seventeenth and eighteenth centuries an absolute monarch instructed his diplomat to be as exacting as possible in order thus to inspire the greatest possible respect on the other side. This was a method in which diplomatic action might in some cases be wrecked; but, if the affair came to a satisfactory conclusion, more had very likely been secured than would have been the case, had too many concessions been offered from the beginning. Even to-day a state like Russia may pursue with success this policy of demanding for the purpose of conceding, where the government has no reason to fear that the whole reciprocity tariff under consideration may be annulled by parliamentary opposition.

But for constitutional states it is especially dangerous. In case treaties with foreign countries are brought about as a result of this whetting of the appetite, enemies are made at home; and, if they are overcome, the number of discontented will, for the future, be increased. The German ministry proceeded according to these tactics in 1887, when they advocated the increase of the duty on grain from 3 marks to 5 marks. They wished to secure "compensation material" for treaty negotiations to be entered into later. The tactics succeeded; for when in 1892-94 they accorded to Austria-Hungary and Russia the reduction from 5 marks to 3½, grain duties, they induced these states to conclude tariff treaties with us. But with this grain tariff of 1887, which was meant only as a negotiation tariff, they had whetted the appetite of the agriculturists. It is true the Agrarians suffered a repulse in

1892-94; but immediately after, the discontented began to gather to the phalanx of the agriculturist league (*Bund der Landwirte*), which, after a decade of the most bitter internal dissension, forced the ministry not only to restore the tariff of 1887, but even to considerably increase it. The example teaches that, if treaties are brought about as a result of an increased "bickering tariff," perhaps only a Pyrrhine victory has been won.

But whether tariff treaties come about becomes the more problematical in direct proportion as the weapons of the home country are made sharper. Or, to use an expression very common among us, the heavier our cavalry boots, the more likely will it be that this fashion be generally adopted. Even the very governments which have special misgivings against it will fall in with the custom, in order not to lay themselves open to the charge of cowardice.

The prophecy was not hard to make that, as a result of the German procedure, an international armament epidemic would be precipitated, and was fulfilled exceedingly rapidly. Aiming especially at us, Austria-Hungary, Switzerland, and Russia raised their tariff walls.\*

Because the German agrarians had secured a higher protection, the agrarians of Austria-Hungary demanded the same (and received it) on the plausible ground that otherwise a flood of Russian and Rumanian grain would threaten them. Because the German manufacturers had received many tariff favors, these were accorded also to the manufacturers in the neighboring states. As Germany had given as a motive for her dealings the exclusive policy of the United States and France, so our former partners justified a similar procedure upon their part by the policy which Germany had manifested. As Germany made it known that she had by no means the evil intention that might appear, but was ready to

\*The publication of a new, higher general tariff is to be expected shortly from Italy.

make terms, so the other states gave the same assurance, and emphasized that "on principle" they were ready to make treaties. But, *si vis pacem, para bellum*. Their ministries, just like ours, use this proverb as a by-word for the justification of their tariff manœuvres. But will peace or war be the outcome?—that is the question. Upon the United States and France, Germany has made no impression by her armament, has not even sought to do so; for agreement with these countries lies for the present considerably beyond the realm of possibility.\*

Germany thus far has only succeeded in making the protectionist parties of Austria-Hungary, Russia, and Switzerland, more passionately clamorous than ever. In any case there would be many difficulties to overcome in the negotiations. The difficulties, however, are now considerably greater than they would have been if Germany had continued with her former general tariff.

The melancholy complaint that a long time will have to pass before new tariff agreements can be concluded comes even from that part of the German press in which formerly the armament policy found its especial support; that is, from the press representing the manufacturers, some of whom, it is true, would like to see higher duties, but most of whom regarded them merely as a means of eliciting from foreign countries more favorable concessions. "The negotiations must now be conducted not on the basis of existing tariffs familiar for years, but on the basis of tariffs entirely new, which have not been tested by experience, whose content has not been cleared up and explained by the elaboration of new official speci-

\* It is obvious enough why an agreement between Germany and France is not to be thought of. That a tariff agreement between us and the United States is quite desirable, Count Posadowski has lately stated with emphasis. But, unfortunately, public opinion is more nervously excited towards the United States than to any other nation, as a result of their extremely favorable balance of trade during the last few years. Add to this the further consideration that the Dingley tariff is too inelastic, permitting of but slight series of reductions, and those unimportant. Before a treaty can be concluded with the United States, a revision of the Dingley tariff must take place.

fication lists of commodities. The mercantile people have not yet been able to gather any experience as to the working of these. Ministries and negotiators will first have to study these innovations before they can formulate their demands."\*

No nation knows what the other has in mind, as to which tariff groups it is disposed to yield, and to what extent.

It is true that the governments, often showing their teeth for a while, may come to terms in the end, and the parliaments approve the agreement. But it is equally possible for the negotiations to be wrecked in the preliminary stage, in the cabinets, for each state may trust too much in its own weapons, each one thinking that the other will ultimately yield more; and so the psychological moment will go by, or else the negotiators, distracted by the sight of the protectionist party of their own land, will venture too little concession. It is almost certain, at any rate, that the German negotiators will be extremely chary in the use of the "compensation material" of most value; namely, the unfixed agrarian duties. For, if these are compromised, they know that the agitation of the *Bund* will break forth with elemental force. A difficult problem indeed confronts them. If they preserve an attitude too reserved, they will gain too little from foreign negotiators. If they are too generous, they will be in danger of being repudiated by the agrarian majority of the Reichstag.

Count Caprivi was once advised to equip himself with a negotiation tariff of higher duties, in order to procure "objects of barter." He replied that this was the worst policy any one could think of for obtaining good treaties. It seems to me that he was entirely right. To-day, however, when trade jealousy has eaten further and deeper than at that time, there are still weightier considerations which argue against the "armament tactics."

Another policy would have guaranteed the continua-

\* *Deutsche volkswirtschaftliche Correspondenz*, 3 February, 1903.

tion of the treaty era, which would have more effectively secured the further extension and maintenance of trade between Germany and the world. If Germany had increased only those tariff groups which she felt unavoidably bound to raise, on account of the pressure of the agrarian party, and had increased them only to as high a rate as she intended to maintain; had she declared that she for the rest was quite ready in a new reciprocity tariff to grant under certain circumstances the same, and possibly even greater, concessions in case she should be met half-way,—had she pursued this policy, presumably the international “armament epidemic” would not have broken out. For in this case Germany, instead of making opponents everywhere, would have gained allies abroad. She would have been pursuing a policy which I would like to formulate thus: *Si vis pacem, para socios*.

In that case those foreign groups of producers who in the past have supplied the German market, and who now might hope to gain still further hold on that market, would have urged their governments and parliaments not to refuse the hand proffered by Germany, not to destroy that hope by raising their customs duties.

Whereas now the agrarians of Austria-Hungary, Russia, and Switzerland are using their political influence to make their states take up arms against Germany, whereas at present the agrarians of these nations are making common cause with our “home market” sentiment, they might have joined in alliance with our manufacturers who are interested in the export trade, and have fought down the protectionist desires of their own manufacturers who are hostile to treaties. Germany would have won allies in foreign countries, and with these would have held the enemy in check.

The fact that our agrarians and their academic partisans would have nothing to do with such a policy (their by-word being only “armament tactics”) is easily ex-

plained. They would be best pleased if no reciprocity tariff were effected, but that the general tariff of the 14th of December, with its inordinately high rates on all agricultural products, should come into full operation. But I cannot understand how men like Schmoller can take this position, nor men like our ministers, who wish peace rather than war, who have again and again declared that on the basis of the increased agricultural duties they are endeavoring only to bring about the conclusion of new treaties similar to the former ones, but with stronger protection to agriculture "on a just and equitable basis." It is true, I repeat, that the "armament tactics" may gain their object, but only by a roundabout course which involves the possibility that the goal may be missed, and the result of which may be that the neo-Mercantilism, which ought to be opposed, will gain a surer footing, and extend to other countries.

The economic fighting situation of Germany in the international world of trade is by no means improved by raising the tariff walls in such places as she is willing shall be levelled again. The other nations have promptly imitated the manœuvre. Thus only confusion has been brought about, and opposition stirred up which might have been avoided.

*Qui vivra, verra!* My surmise is that, as a result of the "armament tactics," the good intention of Germany of obtaining again a comprehensive "international agreement," as in 1892-94, will be unsuccessful for the present. If, indeed, the elections to the Reichstag turn out against the Agrarians, matters might be different. A compromise might be effected with Austria-Hungary, Switzerland, etc., as soon as the German negotiators are freed from the nightmare that their labors will come to naught through the action of the agrarian majority, should they reduce the unfixed agrarian duties too much; that is, those upon cattle and garden produce. But, if the parlia-

mentary situation remains about the same after the election as it is to-day, I should like to prophesy that the agreement with Belgium will be the only one saved out of the confusion — only a pitiful fragment of the treaties in force at the present time.

In conclusion, I disapprove of the new tariff as a permanent arrangement, in so far as its content has already been determined; *i.e.*, as it contains minimum duties on grain, which are far higher than the rates of former reciprocity tariffs. Germany needs no higher protection against foreign agricultural imports, but an extension as well as maintenance of the exports of her manufactures. I also condemn the new tariff in so far as it is intended only as an "object of barter." The method of negotiation upon the basis of the previous general tariff would have been much more promising than that of making "proposals" with the intention of conceding the point,—a plan which Dr. Barth satirized so well in *Die Nation* as having been elsewhere employed only in dickering over the sale of old coats and trousers.

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## AN INTERNATIONAL SURVEY OF THE COTTON INDUSTRY.

Among the larger industrial changes of the last thirty years few exceed, in importance and interest, the marvellous growth of the manufacture of cotton by machinery. Not only in its original seats, but also in regions where its introduction came much later, the industry has expanded wonderfully. The progress in the several countries has, however, been far from uniform in regard either to its magnitude or to the description and quality of the fabrics produced. Nor are the circumstances under which it has been realized at all alike, nor of similar significance when they are brought to bear upon the problem of the present and future international position. Each case must be separately examined; and we must determine the precise causes of the progress, and whether these have exhausted their force, or are likely to continue, or to be aided or checked by new influences.

But a preliminary question arises. The establishment on a large scale, in recent years, of cotton mills near to the source of the principal raw material, in the American Southern States and in India, and its commencement in China and Egypt have encouraged the assumption that the industry must tend to gravitate more and more to the cotton field. Thus, in his address delivered on 22d October last, as Rector of the University of St. Andrew's, Mr. Carnegie said: "Capital, management, and skilled labor have become mobile in the extreme. The seat of manufacturing is now, and will continue to be more and more, simply a question where the requisite raw materials are found under suitable conditions. Capital and skilled labor have lost the power they once had to attract raw materials: these now attract labor and capital. The conditions are reversed. The cotton industry, for instance, was attracted from Old to New England, and is now attracted from it to the Southern States alongside the raw material."

There is much, no doubt, in a merely extrinsic view of Southern and Indian progress to give a certain strong appear-

ance of probability to the theory laid down by Mr. Carnegie. The facts are before our eyes. Capital and skilled labor *have* been applied on a vast scale to manufacture at the sources of the raw material. But many other things have to be considered before we can conclude that this new phenomenon is to be attributed to the greater mobility, in recent years, of capital and labor. Raw material, too, has become much more mobile. If the cost of transporting raw cotton to the older seats of manufacture were alone to be taken into account, it would appear that there is to-day far more reason for the supremacy of the industry in districts remote from the cotton fields than there was half a century ago. The cost of transport and marketing has been reduced to less than one-eighth of what it was then. To this extent, at least, the raw material has become very much more mobile; but this is not the only consideration, and other factors entering into the problem will receive attention presently.

It is commonly supposed that, in the earlier years of the mechanical spinning and weaving of cotton, Great Britain had for a long time the start before other nations. This belief is not strictly accurate. Machinery was used in both branches almost, if not quite as soon, in the United States as in England. From priority of establishment, therefore, the English industry gained little. Indeed, during the Napoleonic wars, at the end of the eighteenth and in the earlier part of the nineteenth century, when cotton spinning by steam and water power began to be important, the advantage was with the Americans, since they were then, and for a long time afterwards, free from the heavy customs duties on raw cotton and most of the other materials of production — coal, of course, excepted — besides the excise duty on printed cotton goods, which oppressed the spinners and manufacturers of the United Kingdom. Moreover, the brief war of 1812-15 between the States and the old country gave a strong impetus to the American industry. The prices of cotton goods, on the western side of the Atlantic, rose to four times their previous amount; and cotton-spinning mills there were multiplied so excessively that, after the restoration of peace in 1815, many of them were closed, and became for a time almost worthless. In the fol-

lowing year protective duties were imposed, mainly by the influence of the Southern representatives in Congress, for the purpose of reviving and encouraging home manufactures, the cotton industry of the North being mostly opposed to them. Before 1813 steam and water power had been applied only to the spinning branch in both countries, but in that year the first mechanical looms were erected in the United States. Comparatively few were then in existence in Europe, and in 1816 there were but 2,000 power looms in Lancashire.

In Switzerland, France, Germany, and even in Austria, Italy, and Belgium also, the factory system of spinning was developed almost as early as in Great Britain; but weaving by power looms was hardly established in the Continental countries on an important scale by 1830, except in a few particular districts, such as Alsace, the Vosges, Rouen, Elberfeldt, and two or three Swiss cantons. This tardier development of mechanical weaving on the Continent continued long after 1830; and it has had important consequences, as we shall presently see.

Bearing in mind the fact that, regarded as a completely mechanical industry, cotton spinning and weaving had not become thoroughly rooted in Great Britain until towards the close of the first quarter of the last century, one is drawn to the conclusion that at that period it had not gained an appreciable priority in time of its American rival. Its position in 1831-35, in relation to the cotton industries of the Continent and the United States is approximately indicated by a few figures. In those five years the average annual consumption of cotton was:—

	Millions of Lbs.	Per Cent.
United Kingdom . . . . .	295.2	100
Continent of Europe . . . . .	142.7	48.3
United States . . . . .	78.5	26.6

So important had been the progress of the industry in Europe and America between 1820 and 1835 as to prompt the following significant remarks, written in 1836, in the Introduction of Dr. Ure's *Cotton Manufacture of Great Britain*:—

“The encroachment of foreign competition upon the cotton trade of the United Kingdom has become so rapid of late as

to excite alarm for its supremacy, under our heavy taxation, in any mind not besotted by national pride. The continent of Europe and the United States of America, for some time after the peace of 1815, possessed factories upon so small a scale that they could not be regarded as our rivals in the business of the world. But now they work up nearly 750,000 bales of cotton wool, which is about three-fourths of our consumption, and have become formidable competitors to us in many markets exclusively our own."

This was written in 1836. Another instance of alarm at the supposed relative decline of the English cotton industry occurred in that year when the Board of Trade (the official Department of Commerce) forwarded to the Manchester Chamber of Commerce a number of samples of various descriptions of cotton piece goods, including prints produced in Germany and Switzerland. These were examined by a committee, of which Richard Cobden, then a director of the Chamber, was a leading member. The report shows that he and his colleagues were deeply impressed by the excellence and cheapness of these productions; and there is conclusive evidence, in a memorial to Parliament which he drafted two years later upon British Customs and Excise Policy at that time, that he had begun almost to despair of the English cotton industry as a competitor with the corresponding industries of the Continent, unless the oppressive fiscal burdens then laid upon it were removed. But even since the advent of Free Trade fears of approaching decline have on a few occasions been expressed more or less loudly.

What is the relative position of the industry in the United Kingdom, the Continent, and the United States to-day, measured by the quantity of raw cotton consumed in each? In the last cotton season — the year ended on September 30, 1902 — the consumption in these three great divisions was: —

	<i>Millions of Lbs. Per Cent.</i>	
United Kingdom . . . . .	1,626.5	100
Continent of Europe . . . . .	2,392.0	147
United States . . . . .	2,018.5	124

Judged, therefore, by the test of the amount of raw material consumed, Great Britain has fallen from the highest to the lowest position within the last seventy years.

We have unfortunately no trustworthy statistics of the number of spindles at work in each of these divisions during the period 1881-85. The number now at work, however, it is possible to state; and the result of a comparison presents a striking contrast with that just arrived at from the statistics of cotton consumption. Here they are:—

	<i>Cotton-spinning Spindles.</i>	<i>Per Cent.</i>
United Kingdom . . . . .	47,000,000	100
Continent of Europe . . . . .	33,900,000	72.1
United States . . . . .	21,559,000	45.8

From this point of view Great Britain again takes the first place, the Continent following second, and the United States third as before, though much more closely in both cases.

The apparent paradox that, whilst still possessing very much more spinning machinery than the Continent or the United States, Great Britain spins very much less cotton than either of them is easily explained. The yarn produced in English mills is by many degrees finer and of higher value than that spun in the mills of the other two regions. English cotton yarn has long been growing finer and finer. This change has been brought about by two or three causes, but mainly it is a consequence of the increase of machinery in countries to which the coarser British yarns and piece goods were formerly sent. Another cause is that the progress of mankind in wealth and refinement has encouraged the demand for superior, more varied, and more tasteful cotton fabrics, requiring for their production finer yarns. For the spinning of these, and in a great degree for the weaving of the superior fabrics, the climate and the training and skill of the managers and work-people, as well as the industrial and commercial organization of the English cotton trade, have proved themselves admirably adapted.

The rapid progress of cotton spinning on the Continent during the last fifty years is to be accounted for, in part, by the great industrial and commercial awakening which followed the settlement of the Franco-German conflict. The new spirit was, of course, most powerful and most effective in Germany. But it pervaded the rest of the nations; and one of its fruits was a larger demand for labor, a rise of wages, and a great uplifting of the material condition of the people. To this were

added increase of population and vast improvements in the means of transport, aided by the important easing of the customs tariff restrictions which, before 1860, had impeded international commercial intercourse between the European countries. It is true that after the Franco-German War a powerful Protectionist reaction set in, which became still stronger in 1878, when Prince Bismarck gave it the countenance of his powerful authority. Thirteen years later, however, a more liberal commercial policy supervened, which, under the impulse of German initiation and guidance, resulted in the series of European treaties of 1891. On the whole, notwithstanding some serious backsliding, the customs arrangements of the European States during the last forty years have not entirely lost the impress of the Anglo-French treaty of 1860, negotiated by Richard Cobden. When contrasted with the highly restrictive and, in some respects, prohibitory system previously existing, the régime which has since prevailed has, reactions notwithstanding, been exceedingly favorable to international commerce in Europe.

All these considerations bear with special force upon the question of the great progress of the Continental cotton industry, because its productions are almost entirely consumed within the boundaries of Europe. Of a very few special kinds of cotton goods moderate quantities are sent to other parts of the world, but in relation to the whole they are of trifling account. Regarded in its entirety, the Continental cotton industry must be considered a home-trade industry; and its great expansion within the last half-century must be attributed mainly to the enlargement of the home market.

But there is another contributory cause which is of great significance in estimating the present position and the prospects of the Continental cotton industry. Before 1870 the process of substituting power-loom weaving for the hand-loom method had made relatively very moderate progress in Europe outside the United Kingdom. In the latter the cotton hand-loom had quite disappeared; and in the United States it survived, as a remnant only, in the mountains of Kentucky and Tennessee and in isolated spots in the Southern States. But among the Continental nations the handiercraft weaving of cot

ton was widely prevalent, not only as a domestic, but also as a semi-factory system. Within the last thirty years it has been steadily giving way to the power loom, yet it is even now very far from being extinguished. In Russia the number of hand looms weaving cotton goods is still enormous; in Austria there are 40,000 of them; and in Germany, France, Italy, Spain, and the Balkan countries many thousands are at work. Now the effect of the substitution of the mechanical for the hand loom since 1870 on the Continent has been the same as that of the like change in Great Britain which was completed before that year. It reduced greatly the prices of woven goods; and their cheapness, together with the other economic developments already referred to, stimulated the demand for them enormously; and the satisfaction of this enlarged requirement involved the necessity of a much greater supply of yarn. Hence the very rapid addition to the number of spindles and the consumption of raw cotton. Before the Franco-German War of 1870-72 the quantity used by the Continental mills had never reached 800,000,000 pounds. Since then the progress has been almost continuous,—at all events until the season 1898-99, when it was suddenly arrested. The successive upward steps and the movement since 1898-99 are sufficiently indicated by the annexed table:—

## CONTINENTAL CONSUMPTION OF COTTON.

<i>Seasons.</i>	<i>Lbs.</i>
1872-73 . . . . .	821,600,000
1882-83 . . . . .	1,374,800,000
1892-93 . . . . .	1,846,000,000
1897-98 . . . . .	2,288,000,000
1898-99 . . . . .	2,392,000,000
1899-1900 . . . . .	2,288,000,000
1900-01 . . . . .	2,288,000,000
1901-02 . . . . .	2,392,000,000

Between 1872-73 and 1882-83 the increase was at the rate of 55,320,000 per annum; between 1882-83 and 1892-93, at the rate of 47,120,000 per annum; between 1892-93 and 1897-98, at the rate of 88,400,000 pounds per annum; and last season the increase was 104,000,000 pounds. Thus the highest level was reached three years ago. In considering these figures, it is

interesting to note that English textile engineers, who have supplied the bulk of the spinning machinery for the Continental mills, have received exceedingly few orders since 1899, and those chiefly from France, for the equipment of new spinning establishments in foreign Europe. It is further to be observed that at the end of last season the stocks of yarn held in nearly every spinning district of the Continent were very heavy,—a fact which proves that the enlarged consumption of 1901–02 was excessive.

Even the foregoing remarkable figures do not tell the whole story of the extraordinary growth in the consumption of cotton fabrics in Continental Europe during the last thirty years. So great was the pressure of the demand for yarn to supply the steadily increasing number of power looms that much larger quantities of it were imported from England. For the following figures I am indebted to Mr. Thomas Ellison, of Liverpool:—

EXPORTS OF BRITISH COTTON YARN TO EUROPE.  
(EUROPEAN TURKEY EXCLUDED.)

<i>Years.</i>	<i>Lbs.</i>
1830 . . . . .	56,000,000
1840 . . . . .	91,900,000
1850 . . . . .	90,700,000
1860 . . . . .	116,000,000
1870 . . . . .	93,700,000
1880 . . . . .	96,100,000
1890 . . . . .	123,700,000
1895 . . . . .	127,400,000
1897 . . . . .	121,100,000
1899 . . . . .	104,000,000
1900 . . . . .	79,500,000
1901 . . . . .	78,500,000

These statistics of the Continental takings of cotton and of English yarn are highly instructive in so far as they illustrate the economic progress of the European populations since 1872. They afford, of course, no means of discovering how much of the increase is to be attributed to each of the several stimulating influences previously mentioned. The halt which occurred after 1898–99 excites inquiry as to its causes. In part, no doubt, it is explained by the German and Russian financial



troubles and the consequent depression of trade throughout the greater portion of the Continent during the last two years. I am inclined to think, however, that the arrest of the progress three years ago is largely due to the diminished force of the special stimulus springing from the substitution of power for hand looms: If this be a correct opinion, it warrants the expectation that, in the absence of any new impulse, the increase of cotton spinning on the European Continent will be very much slower in future than it has been during the last thirty years.

But a further question confronts us. May not the check to the increase in the *weight* of cotton and yarn consumed be due very much to the same cause as that to which the same feature in the British consumption is to be ascribed,—namely, the spinning and weaving of finer counts of yarn? Undoubtedly, more fine yarn is being spun, in Germany and France at least, than in 1880; but in spite of the customs tariffs of these countries, in respect of cotton yarn, being especially designed to encourage the production of the finer numbers, climatic and other difficulties have so far prevented any extension of this branch of the industry at all comparable to that which has been accomplished in the spinning of the lower and medium counts. It is certainly true that the average fineness of the yarn shipped from England to the Continent is very much higher than it was twenty-five years ago. Indeed, it is a common expression amongst Manchester merchants engaged in this trade, "The Continental demand for low counts is gone."

Within the last two years the erection of new cotton spinning machinery on the Continent has greatly diminished. During 1902 the total number of spindles remained unaltered or was but slightly augmented in every country, except France; and even there the increase was only about 200,000. In part, no doubt, and perhaps greatly, the arrest of progress thus indicated must be traced to the German financial crisis of 1900, and the consequent depression of trade there and in surrounding States, as well as to the contemporaneous financial and industrial troubles in Russia. But, since the rapid expansion of spinning capacity between the years 1880 and 1900 was undoubtedly due very much to the substitution of

power looms for hand looms, it is a reasonable inference that, even after the effects of the financial disturbances have passed away, the rate of progress will diminish.

Assuming that the force of this special and incidental impetus to the Continental cotton-spinning industry is now becoming spent, a further question arises. Is it not probable that the production of the spindles and looms of some at least, if not all, of the Continental nations will begin to compete seriously in the extra-European markets? All that can be said on this subject at present is that there is no obvious reason why it should do so, apart from some kind of State aid or the pressure of temporarily overstocked home markets. To one or other of these adventitious forms of assistance the export of an appreciable proportion of the Continental cotton goods now finding their way into neutral markets must be ascribed. This fact is of itself highly significant; for it shows that, although there are a few special descriptions which can be exported in open competition and under natural conditions to such markets, the prevailing circumstances are not at all extensively favorable to the creation of an important export of cotton manufactures from the European countries, in competition with England, not to speak of the United States, to which attention must now be directed.

Writing upon the United States cotton industry mainly for American readers, I am conscious of approaching the subject with some diffidence. Yet, having gathered much information about this and other American economic questions by long observation, by strong sympathy with the American people, and by conversation and correspondence with well-informed citizens, I hope I may be found reasonably free from important error.

The chief interest of the progress of the American cotton-mill industry in recent years lies in its amazingly rapid growth in the Southern States. Before the Civil War of 1861-64 there were very few mills in that section of the country. For well-known social and economic reasons organized manufacture could not flourish in the midst of slavery. Yet in the year 1847-48 their consumption of cotton was 75,000 bales against 532,000 bales in the North, and in 1860-61 it was 193,000

bales against 650,000 bales. Now comes a remarkable fact. In the latter year, just before the war broke out, one-half of the population of the Southern States—that is to say, about 5,000,000 people—were clothed in hand-woven cotton goods. In 1870, five years after the war, not less than 3,500,000 were thus clothed. These are the estimates of my friend Mr. Edward Atkinson, of Boston,—than whom, I believe, there is no higher authority,—founded upon extensive correspondence and conversation with many old planters, merchants, and other well-informed persons in the South, and confirmed by his own abundant knowledge. In 1880 there was still a considerable remnant of this domestic manufacture in the mountains of Kentucky and North Carolina, where it had long been extensively carried on. It was the last survival of a handicraft industry once prevailing throughout the States, and from that region the labor force of the Southern cotton-mills was drawn for many years after the war. The people, all whites, having acquired the deftness necessary in the handling of threads, supplied a suitable class of operatives for the mills. These, however, did not increase very rapidly until 1879. Since then their progress presents one of the most remarkable incidents in the history of the world's cotton trade during the last twenty years.

This marvellous development may be traced to a concurrence of forces. Until 1875 the spinning mills were largely engaged in producing yarn, partly for the hand looms of the South, then gradually disappearing, and partly for the power looms which were superseding them, and were requiring more and more liberal supplies. According to the census of 1879–80 there were 12,360 power looms in the Southern mills. But in 1900–01 the number was 122,902, and it is considerably greater now. Within the same interval of twenty-two years the number of spindles in the South increased from 561,360 to 5,819,835. The rate of expansion was thus almost equal in the two departments. But the substitution of machine for hand-loom goods was probably all but completed between 1885 and 1890. This operation brought with it as a consequence, just as it did in Europe, reduced prices of cloth and an enlarged consumption, which was further promoted by the great growth of

population, owing partly to natural increase and partly to immigration from the North. But within the last fifteen or twenty years another and a very important new field of distribution for Southern cotton goods has been opened out in Eastern Asia and elsewhere abroad. Still further, the cloths made in the South, which are of coarse texture, have competed increasingly in recent years with the production of the New England manufacturers, compelling them to devote their attention more and more to the finer and more highly finished descriptions, which are not yet made in the South.

The deliberate opinion of Lancashire manufacturers who within the last twelve months have visited the United States for the purpose of investigating the cotton industry is that they have nothing to fear from the competition of the North. In the South, however, one item in the cost of production—that of labor—threatens, they think, rather seriously not only their own—the Lancashire—position, but also that of the manufacturers of the Northern States. The rates of wages in relation to the quantity produced are not more—comparing the same classes of goods—than from one-third to one-fourth of those prevailing in Lancashire and in New England, which are approximately the same, although often the North American *piece-rates* of wages are slightly lower than the English. How is it that in one part of the same country a sufficient supply of labor can be obtained at piece-work rates so greatly below those paid in another part? The answer is highly interesting. Some of the workers have come, as already stated, from the mountain districts of Kentucky and North Carolina, where they formerly made a scanty living by hand-loom weaving, eked out perhaps by the cultivation of the soil on a small scale. Others are drawn from the families of poor farmers who have settled in the South since the war. In both cases the remuneration offered in the mills was so much better than their previous scanty earnings as to induce them to adopt the more remunerative calling. There is good reason to believe, however, that this disparity of labor cost cannot be very long maintained. The scarcity of adult work-people has become so urgent that the working force of many mills consists, to an astonishing extent, of little children of eight to ten years old.

Immature labor of this kind cannot be very long continued. Nor is it likely that rates of wages so greatly below those prevailing in the North can remain unaltered for any considerable time. I am told, moreover, by visitors to the States who have returned to England within the last month that the cotton manufacturers of the Northern States entertain no serious apprehensions with regard to the permanence, or at any rate the increase, of Southern competition.

But there is apparently another contributory cause of the extraordinary spread of cotton-mills in the South. Far more extensively than in the North the employment of the new "automatic" loom prevails there. Calling for less labor, attention, and skill on the part of the operative, the American type is very well suited to the kind of weaving characteristic of the South. These machines, employed upon such work, go far towards justifying their descriptive name; and a single weaver is able to look after three times as many of them as of the ordinary loom. Hence the labor cost of each piece of cloth is enormously reduced.

Upon one important difference between American and English methods of weaving some discussion is just now going on in Lancashire. In this country cotton looms are run at a speed averaging from 15 to 20 per cent. higher than in the United States, yielding therefore a larger production, at the expense, however, of greater strain upon the yarn, more frequent breakages of threads, and stoppages of the machine. The question is whether or not it would be better to reduce the speed so as to enable the weaver to take care of more looms. The lessened product per loom would of course involve increased cost of production for fixed charges; but this might be more than compensated by lowering the piece-rate of wages without any loss of earnings to the weaver, who would increase his individual output by being able to tend a larger number of looms without additional exertion.

The main interest of the subject of American competition with British cotton manufactures centres in foreign and colonial markets. There can be no doubt that to some of them certain descriptions of American goods are going in increased quantity. We know, moreover, that in one market, that of

China, sheetings, drills, and jeans from the United States have, within the last ten years, taken a larger place than British makes of these classes.\*

One cause of this change has recently been practically removed,—the very much higher freights charged for the carriage of goods to Shanghai from British ports than from New

\* *Editor's Note:* The following figures are instructive in this connection:—

COTTON IMPORTS INTO SHANGHAI FROM FOREIGN COUNTRIES AND  
HONG KONG.

DRILLS.

	English.	Indian.	Dutch.	American.	Japanese.	
1891, pieces . .	270,847	155	28,450	856,485	n.m.	p. 215
1892 " . .	151,154	420	34,680	621,882	n.m.	p. 213
1893 " . .	426,768	10,261	63,120	422,190	n.m.	p. 224
1894 " . .	256,262	2,670	101,185	720,084	11,606	p. 231
1895 " . .	268,811	16,855	84,657	586,983	11,205	p. 267
1896 " . .	201,618	39,849	83,850	1,214,577	8,941	p. 243
1897 " . .	76,202	11,243	25,862	1,531,647	1,250	†
1898 " . .	146,343	2,258	10,710	1,298,986	916	p. 249
1899 " . .	143,812	4,568	29,490	1,607,560	1,180	p. 299
1900 " . .	132,420	7,430	37,394	825,521	n.m.	p. 285
1901 " . .	91,710	1,049	30,450	1,639,113	.40	p. 300

SHEETINGS.

	English.	Indian.	Dutch.	American.	Japanese.	
1891, pieces . .	845,144	20,510	13,620	2,008,686	n.m.	p. 215
1892 " . .	648,825	45,905	16,770	1,302,695	n.m.	p. 213
1893 " . .	728,825	93,690	23,520	903,335	n.m.	p. 224
1894 " . .	470,123	93,982	8,240	1,287,397	10,871	p. 231
1895 " . .	640,765	80,100	5,036	888,773	2,591	p. 207
1896 " . .	1,123,802	157,111	1,040	2,246,032	21,625	p. 243
1897 " . .	389,569	23,700	—	2,418,971	24,744	†
1898 " . .	617,292	16,520	—	2,472,035	7,281	p. 249
1899 " . .	866,332	42,192	n.m.	3,960,037	24,640	p. 299
1900 " . .	701,068	43,323	1,500	2,292,606	17,829	p. 285
1901 " . .	434,401	2,620	1,262	2,827,804	1,205	p. 300

— *From the Imperial Maritime Customs, China. Returns of Trade and Trade Reports, year and page as above.*

† *From M. von Brandt, China und seine Handelsbeziehungen, u. s. w., Berlin, 1896, s. 122.*

York. Another cause is the excessively low labor cost of production in the American Southern States. It is the production of these very classes of manufactures, so extensively produced there, which has gone to swell greatly in recent years the exports from America to China. The cure for this particular inequality is simply a matter of time; for it can only come about by the play of economic forces which, though slow, are sure.

Before attempting to summarize salient points in the British position, it is desirable to refer to the machine cotton industry of the East, of India, Japan, and China, where the conditions are widely different from those of the European and American industries. The manufacture of cotton began in Asia, whence it was brought to Europe in its handicraft state. Within the last half-century Europe has given it back to Asia as a machine industry. The first Asiatic cotton-mill was established in the island of Bombay in 1851. It contained 26,000 spindles, and no looms. In 1871 the number of spindles in all India was about 430,000, and there were 5,575 power looms. Twenty years later (in 1891) the number of spindles had reached 3,250,000, and of looms 23,000; and now there are about 5,000,000 spindles and 41,000 looms. In the United Kingdom the number of cotton spindles is approximately 47,000,000, and of looms 750,000; that is to say, one loom for every 62.6 spindles. In India the proportion is one loom to 122 spindles. The difference is significant, because it shows that machine spinning has made much more rapid progress in India than machine weaving. The old spinning-wheel has not quite disappeared, but it is very nearly extinguished; and yet there are countless numbers of wooden hand looms still at work in nearly all parts of the country, resisting alike the competition of the coarse productions of the native mills and of the finer goods imported from England. The records of the Indian government may be searched in vain for definite statistics of the handicraft weaving industry, but the census returns of the occupations of the people and the famine reports supply information enough to show that hand-loom weaving is still carried on to a vast extent in every province. In a statement issued by the India Office in 1885 it was estimated that not less than



84 per cent. of the 1,011,815 pounds of raw cotton grown in the Punjab was spun and woven there in the homes of the people. But, undoubtedly, the Indian mills were for many years after their inception engaged mainly in displacing the old indigenous handicraft industry; and the process is still going on, though now very slowly.

But within the last twenty-five years the product of the Indian spinning mills has found a very large outlet in other parts of Asia, especially in China. In the year ended March 31, 1880, the total export of Indian yarn was 25,862,474 lbs., of which 22,567,297 lbs. went to China. In 1899-1900 the total amount was 240,693,027 lbs., of which the proportion taken by China was 231,570,757 lbs. Within twenty years the outside demand for Indian cotton yarn was multiplied more than  $9\frac{1}{2}$  times, and the China demand more than 11 times. The political disturbances in the Far Eastern Empire have so greatly interrupted its foreign trade during the last two years that the statistics of this trade since 1890 are not instructive for the present purpose. It is quite clear, however, that the Indian cotton-spinning industry owes its remarkable progress quite as much, to say the least, and probably more, to the great opening for its product in China than to the enlargement of the market in India. The yarn was wanted there, of course, because it was very much cheaper and better than the old hand-spun yarn made from Chinese cotton, which is weak and short in staple, and can be spun by hand only at great cost.

India has never sent to Japan any considerable quantity of yarn. In 1879-80 the amount was 1,314,090 lbs., and in 1899-1900 only 180,000 lbs. But in Japan a very extensive cotton-spinning industry has arisen, which is also largely engaged in supplying the China market. The number of spindles in the Japanese mills is now about 1,250,000, one-fourth of the capacity of the Indian establishments; and Japanese competition has arisen in spite of the fact that the greater part of the raw material which they use is imported from India itself. To a large extent Japanese yarn is used to supply the native hand looms of Japan, for there are few power looms yet in Japan; but much of it is sent to China, where it is welcomed



as a rival to the Indian product. But in China itself an attempt has been made, within the last eight years, to establish a cotton-spinning mill industry, mainly by Europeans, who argued that, if India and Japan could find so large a market for their yarn in China, there must be room for a spinning industry there. The result of this new departure has not been at all encouraging. Chinese cotton is of poor quality; and it is by no means certain that, even if it could be improved, native labor would be found anything like so efficient as is that of India or Japan. The total capacity of the cotton-mills of China is probably not more than 700,000 spindles; and the capital invested in them has, on the whole, proved so unprofitably employed that no extension is now going on, and none is contemplated.

Reverting to the Indian cotton industry, it must be observed that the consequences of its creation have been very important from an international point of view. One of its earliest results was to substitute machine-made yarn and cloth for the handicraft product within the country itself. In this respect it followed precisely the course observable in all countries where cotton-mills have taken root. But it would be a great mistake to suppose that the ancient domestic cotton weaving of India, or even the employment of the hand spinning-wheel, has disappeared. On the contrary, there is abundant evidence, as already stated, that hand-loom weaving is still carried on very extensively indeed in certain provinces. The next result was the supply, on a very extensive scale, to other parts of Asia, and particularly to China, of cheap and good Indian yarn for the consumption of the native hand looms. The current in this last-named direction has been seriously disturbed within the last two years by political events in China, and the proprietors of the Indian mills have had to pass through very trying times. Their ill-fortune has been greatly aggravated by deficient rainfall in India and a serious reduction in the supply of cotton. For these reasons many of the Indian spinning companies have had to face serious losses; and a few of them have been forced into liquidation, prominently some of the Bombay companies, whose production has hitherto gone chiefly to China.

Briefly stated, the conclusions to which I have been brought by a careful study of the machine cotton industry in Asia are: (1) that, although wonderfully rapid during the last thirty or forty years, it has not only been extensively engaged in substituting machine for handicraft production, but also in displacing English imports of coarse yarn; (2) that the progress has not gone very far at the expense of the hand-loom weaving branch, which is still able to hold its ground very successfully, notwithstanding the establishment of about 43,000 power looms in India and China, whilst Spain, one of the most backward countries in Europe industrially, possesses nearly 70,000; (3) that there is no present prospect of either India, Japan, or China being able to compete successfully with the European and American cotton industry in the production of the finer yarns and the higher qualities of piece goods; and (4) that the main hope of India and China in this field lies in the gradual disappearance of handicraft manufacture, in which, however, there are great possibilities of expansion, but always within the limits of the coarser and cheaper qualities. Perhaps some exception to this last statement should be made in the case of Japan, whence some excellent specimens of woven goods have already made their way into the markets of the Far East. In Japan, however, the power loom has as yet made very little progress, most of the piece goods produced there being made in hand looms.

There remains the question how far the extraordinarily rapid development of the machine cotton industry has affected, and is likely to affect, the demand for European and American — particularly English — cotton goods and yarns in Asia. It is quite certain that the imports into India, and also into China and Japan, of the coarser counts of English yarn, have greatly fallen off within the last twenty years. The supply of the finer English spinnings to all these countries is, however, fairly well maintained; and the following figures show that the imports into India of all kinds of cotton yarn are still on the whole considerable, and that the decrease within the last ten years, though great, has not been alarming, in view of the persistence of plague and famine since 1899:—

## IMPORTS INTO INDIA OF COTTON YARN.

<i>Year ending March 31.</i>	<i>Lbs.</i>	<i>Year ending March 31.</i>	<i>Lbs.</i>
1890 . . . . .	46,382,525	1900 . . . . .	42,621,854
1891 . . . . .	50,970,950	1901 . . . . .	34,803,334
1892 . . . . .	50,404,318	1902 . . . . .	38,299,409
<b>Annual average . .</b>	<b>49,252,598</b>	<b>Annual average . .</b>	<b>38,574,856</b>

The imports of piece goods into India have actually increased within the decade, notwithstanding the depression occasioned by the plague and the successive famines. The extent of the increase is shown in the following table:—

## IMPORTS INTO INDIA OF COTTON PIECE GOODS.

<i>Gray:</i>	<i>Yards.</i>		<i>Yards.</i>
1890 . . . . .	1,257,001,362	1900 . . . . .	1,274,912,153
1891 . . . . .	1,280,539,631	1901 . . . . .	1,192,173,060
1892 . . . . .	1,173,176,482	1902 . . . . .	1,186,764,255
<b>Annual average . .</b>	<b>1,236,905,825</b>	<b>Annual average . .</b>	<b>1,217,949,822</b>
<b>Bleached:</b>			
1890 . . . . .	339,098,094	1900 . . . . .	444,546,485
1891 . . . . .	373,148,661	1901 . . . . .	467,482,379
1892 . . . . .	361,394,837	1902 . . . . .	580,088,497
<b>Annual average . .</b>	<b>357,880,830</b>	<b>Annual average . .</b>	<b>497,371,120</b>
<b>Colored:</b>			
1890 . . . . .	400,949,291	1900 . . . . .	471,884,268
1891 . . . . .	360,335,370	1901 . . . . .	343,164,775
1892 . . . . .	348,116,680	1902 . . . . .	422,860,841
<b>Annual average . .</b>	<b>369,800,447</b>	<b>Annual average . .</b>	<b>412,636,628</b>
<b>All Kinds:</b>			
<i>Annual Average.</i>		<i>Annual Average.</i>	
1890-92 . . . . .	1,964,586,802	1900-02 . . . . .	2,127,957,570
Increase in 1900-02, 163,370,768.			

It is evident that, in spite of the disastrous experience of India during the last three years, and of the efforts of the Indian mills to find outlets in the Dependency itself for the surplus production, enforced by the partial loss of the China market, English cotton goods have not ceased to make their way in greater quantity to India, where also certain kinds of American goods are used, though not in large quantity.

Occasional reference to the progress and condition of the British cotton industry has already been made, at some length, in the preceding portion of this survey. It remains to state the writer's view of it more fully in a general summary of the international position. The spinning and weaving of cotton in Great Britain by modern machinery began under very adverse circumstances. Prolonged and devastating war, profuse national expenditure and all its consequences, heavy taxation and other exhausting sacrifices, prohibitions and fiscal barriers to international trade in other countries, poverty amongst the English people, and scanty capital in the hands of manufacturers were the attendants of its birth and its years of youth. All these obstacles it survived, although the raw material of the industry was entirely brought from distant lands. In spite of all these seeming obstacles the industry rapidly rose to the foremost position. The later progress of the industry in other countries has practically extinguished most of the branches of business upon which its earlier success was founded. Nevertheless, it has continued to increase, and is still increasing. Foreign competition, resulting from natural development or from artificial protection, has impeded, but it has not stopped, its progress; and there is no evidence of its decay or decadence. It has the advantage of a highly favorable climate in Lancashire, a well-trained and industrious body of work-people, directed by experienced management, and supported by an admirable commercial organization which embraces every market in the world. Added to these favorable factors, it has a fiscal system which enables it to obtain all the materials and accessories required in the industry at the lowest possible prices,—lower, indeed, on the whole, than its competitors in other countries can command. Its principal raw material has to be brought from sources thousands of miles away, and yet this important disadvantage has been enormously lessened since it was established. Free competition is its accustomed atmosphere; and, in spite of hostile foreign customs duties upon its productions, it still survives and grows. Whatever future changes may occur, therefore, to help or hinder its course, there is no reason to doubt, still less to despair, of its future, so long as it is allowed to enjoy the benefits of Free Trade.

The obstacles to the prompt adoption of improvements in machinery and methods which arise in a few British industries from labor organizations are not likely to seriously impede their introduction into the British cotton manufacture. For the most part, wages are paid on a piece-work basis; and there is no restriction upon output other than that imposed by the Factory Acts. There are, of course, always questions of adjustment of the piece-work rates whenever new machines are brought in which increase the amount of production whilst lessening the call upon the labor or attention of the work-people. These are settled, usually, on the principle of dividing the pecuniary advantage of the improvement between employer and employee. At the present moment a question of this kind has arisen in connection with "automatic looms," the use of which is only now becoming a practical consideration in Lancashire cotton-mills. The weavers' trade-unions have fully recognized the necessity of adopting one or more of the various inventions connoted by the term "automatic loom," and they are aware that the economy resulting from their employment must be shared by the proprietors of the mills. The proper apportionment of the advantage will no doubt give rise to serious discussion and, it may be, to some conflict; but there is nothing in the disposition of the two sides to justify the least fear that this will impede the introduction of this or any other improvement in the processes of the industry.

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ENGLAND.

### RECENT TENDENCIES IN SOCIOLOGY. III.

#### V.

#### SOCIAL SELECTIONS.\*†

*To recognize that institutions and policies work selectively upon a people, and may profoundly modify its destiny.*

Darwin showed that a species is not stationary, but insensibly drifts in consequence of the fact that those individuals with a certain favorable quality or variation fare better than other individuals in the struggle for existence. The species, like the glacier, moves, but so slowly as to escape the common observation. This process of modifying a species Darwin called "natural selection," and showed that it applies to man as well as to the lower species. But soon the thought arose, Does not *society* impose decisive conditions as well as *nature*? Alongside of *natural selections* are there not — to use the phrase coined by Broca in 1872 — *social selections*? The blood of a people determines its social history. Does not the social history of a people, in turn, determine its blood?

To Galton belongs the honor of being the pioneer in the study of the reactions of society upon the race. In his "Hereditary Genius" he charges the institution of religious celibacy with brutalizing the breed of Europeans. In the Middle Ages the gentlest natures sterilized themselves by taking refuge in the bosom of childless priest-hoods and religious orders. The Church "acted precisely as if she had aimed at selecting the rudest portion of the community to be the parents of future generations. She practised the arts which breeders would use who

\* See appended bibliography, No. V.

† Owing to the recency of this manner of thinking, the writer will not confine himself to the literature solely of the last decade.

aimed at creating ferocious, currish, and stupid natures." But worse followed. "The Church, having first captured all the gentle natures and condemned them to celibacy, made another sweep of her huge nets, this time fishing in stirring waters, to catch those who were the most fearless, truth-seeking, and intelligent in their modes of thought, and therefore the most suitable parents of a high civilization," and by persecution "put a strong check, if not a direct stop, to their progeny." But the servile, the indifferent, and the stupid bred on.

Again, England, by extending a welcome to desirable types that in vast number sought refuge with her from the brutal, bigoted persecutions of the Continent, has undoubtedly raised her average of energy and character. Likewise the rapid rise of new colonies and the decay of old civilizations is mainly due, in Galton's estimation, to the social agencies which in the one case promote and in the other case retard the marriage of the more suitable breeds. In the colony the men marry early; and, on account of the fewness of women, the inferior men find no mates.

Darwin points out that the red hand of war uproots the wheat and leaves the tares, and that standing armies give those rejected by the recruiting officer an economic and matrimonial lead over those selected to serve their time. He observes that the transmission of large property shelters the children of the rich from selective stress, and confesses that the inheritance of wealth is of social rather than of racial benefit. Primogeniture is still worse, for worthless eldest sons with entailed estates cannot even squander their wealth.

A high standard of comfort and a lofty ideal of family life delay marriage in the finer strains of the population, and cause them to increase more slowly than the squalid and reckless. This handicap is only in part neutralized by the higher death-rate among the wives and children of

the lower classes. The amazing progress of new countries has undoubtedly social causes; but it is also partly due to the fact that colonists are above the average in native energy, courage, and initiative.

From natural selection De Candolle distinguishes artificial selection proceeding from the conscious will of man, but he has not isolated that intermediate form exercised by institutions. Nevertheless, through his studies of selection at different levels — savagism, barbarism, and civilization — are scattered some observations on social selections.

He points out that among barbarians the strong and successful man, because he is allowed to mate with several handsome and healthy women, distances the mediocre at a rate he could never attain, were he held down to one wife. Moreover, this mating, as it obeys physical attraction, is peculiarly favorable to the perfecting of physique. The monogamy of civilized societies, on the other hand, exalts female choice, and by giving freer play to sexual selection favors a perpetuation of good moral, and intellectual qualities, albeit at the expense of good looks. In many persons, however, monogamy even now goes against the grain; and hence, unhappily, it calls into being the illicit polygamy of prostitution, which condemns to sterility a contingent of women above the average in good looks and physique.

From the notorious fact that the poorer classes multiply faster than the well-to-do, De Candolle infers that an institution like religion, which is handed down in the family, will triumph sooner if preached among the poor than if it is launched among the rich. He cites Christianity, which won its first following among the humble but fertile classes of the Roman Empire, and Catholicism, which daily gains ground in the United States by the sheer fecundity of the Irish immigrants.

A European reverberation has been awakened by Nietzsche's furious assault on the reigning ideals. According



to this ultra-Darwinist Christianity, the apotheosis of pity, "the religion of the suffering," is a drug for paralyzing the arm of the strong. Our democratic neighbor-morality is consecrated on behalf of timid, gregarious humans, dreading the trampling self-assertion of the superior men. Under the broad shield of these restraints pullulate and degenerate multitudes of sickly and ill-constituted, who ought to be, and once were, harried into feuness by the well-born and powerful.

A régime of peace and law does, indeed, slow up elimination among men, just as perpetual June would check it among insects. But when Nietzsche, going further, imagines that order and equality before the law somehow hinder the finest men from marrying the finest women, and begetting the "beyond man" as promptly as nature will let them, he parts company with the sane.

A perplexing problem for the selectionist is offered by the migrants that in all civilized lands stream incessantly from country to city. This cityward drift is very marked in Germany; and to three Germans, Hansen, Ammon, and Kuczynski, we owe what light has been shed in the matter. Hansen propounds the thesis that the population of cities tends constantly to die out, and that it is and must be replenished from the overflowing rural population. Against the common opinion that the upper, middle, and lower classes are independent streams flowing side by side, he insists that the social classes are the stages of development of one current of human beings flowing from the country. In the city these immigrants are gradually sorted and segregated into classes. In the higher of these classes, families tend to die out rapidly owing to celibacy, lateness of marriage, and the influence of social considerations in matrimonial choice. The city is, then, a devourer of men, and cannot endure without a steady supply of fresh human material from the farms.

Ammon, building further, elaborates a complete account

of the urban apparatus for the selection and promotion of the fittest. The city is a seething cauldron where the healthy overflow from the country is by competition stimulated, tested, and differentiated. Some individuals sink, some vegetate, some achieve a higher social position. The existence of stratified, non-intermarrying social classes insures that this economic grading shall not be without physiological results. The promoted capables not only render efficient service to society, but they mate within their class and beget offspring of more than ordinary ability. These climb higher, wed with their kind, and beget a progeny still richer in talent and genius. But in these forcing houses the human crop, though choice, is light. In the course of three or four generations of over-nutrition and one-sided cerebral stress the superior stocks vanish, and make room for sturdy newcomers swarming up in just the same way from the lower rungs of the social ladder.

The social classes, narrowing upwards, constitute, then, a succession of filter tanks, or — shall we say — a series of paddocks for grading up capables, bringing them to their utmost individual development and causing them to mate with their equals. By this means is society provided with leadership. But the thoroughbred stocks finally die out, so there is no lasting improvement in the human breed. Indeed, the current that filters through this selective apparatus drains country districts of their best elements as well as their worst. To this urban consumption, perhaps, is due the fact that within the historic period Central Europe has been impoverished of its long-skull Teutonic element, and shows increasing brachycephaly.

Kuczynski subjects to a destructive, critical analysis the statistics adduced by Hansen and Ammon in support of their main contention. He insists that the evidence does not show that the city population is incapable of renewing itself indefinitely from its own loins. The fatal

division of labor by which the country produces human beings for the city to consume does not obtain, now that modern sanitation has made city life almost as conducive to health and longevity as country life. The city is, indeed, an economic phenomenon of the first magnitude, sorting and grading the little differentiated stream of human beings attracted to it by its wealth of opportunities. But, anthropologically, it is by no means the crucible, the Bessemer converter, Ammon assumes it to be.

"Social Evolution" is a warning to those over eager to spell out in flaming letters the message of science before the returns have been verified. Having ever before his eyes the fear of Weismann's *panmixia*, Mr. Kidd proclaims that only by rivalry and the selection and accumulation of desirable congenital variations can the human race continue to progress or even escape retrogression. He forthwith proceeds to identify economic competition with the struggle for existence, success with the survival of the fittest, the poverty and suffering of the masses with the elimination of the unfit. The power that drives this selective apparatus is assumed to be the pressure of population upon subsistence. But Mr. Kidd goes on to state that the rivalry of life which conditions race progress is nowhere so strenuous and severe as with the progressive peoples. How this can be, in view of the fact that it is just these peoples that have learned to multiply at a human rather than an animal rate of speed, he does not explain.

If it is the food quest that makes the world go round, the "rivalry of life" ought to be more stressful in Java or India than in France or the United States; but plainly it is not. The lupine theory of progress, therefore, breaks down. The secret of this undeniable keying up of competition among the peoples most exempt from over-population and hunger will never be supplied by biological thinkers like Mr. Kidd. It must be sought of social psy-

chologists like Tarde and Dumont, Veblen and Gurewitsch, who have formulated the laws that govern the expansion of human wants, and have shown how, in societies of a certain type, all classes are inflamed with new desires from the example of the classes above them, and are spurred by social ambition to further efforts.

With Mr. Kidd's opinion of the modern tendency to equalize opportunities, it is instructive to compare that of Haycraft. Kidd hails it as a perfecting of the selective process, whereby the members of the "disinherited" classes are admitted to the rivalry of life on equal terms with the rest. Haycraft grants him that the democratic régime of equal chances for all is a success from the standpoint of social efficiency. Universal competition does, in fact, get the round peg into the round hole, the best man into the best post, the second-best man into the second-best post, and so on. But the race loses. The "social capillarity" that smooths the way upward for the capables lessens their fecundity. They spend more of their lives in preparing for their work and in winning a foothold. They marry later and their brides are three or four years older than the brides of miners or operatives. Even if they rear the same number of children, the interval between the generations is longer, and there will be fewer generations in a given period. The "aristocracy of achievement" that elbows out the old hereditary aristocracy tends, therefore, to extinction. Those who rise are less prolific than those left behind. Under the modern conditions of success it would seem that the lower classes, ever more thoroughly drained of their fittest individuals, must eventually swamp the upper classes, composed of successful combatants in the battle of life. The broad, fecund, self-perpetuating layer of the population will become impoverished, like a wornout tobacco field or a fish pond too closely seined.

Under the influence of the Darwinists, Seeck, the latest historian of the Lower Empire, undertakes to account for

the world-historic decadence of ancient society by social mis-selection. The decay of Greece, characterized by a lamentable lowering of ability in every department of culture, he connects with the ferocious party struggles between aristocrats and democrats. In these struggles, at each turn of fortune's wheel all persons of distinction belonging to the defeated party were banished or slaughtered. Thus, we read of seven hundred families being exiled at one time from Athens, one thousand leading citizens executed at Mitylene, four thousand at Gela. In generations of such savage work the contending factions contrived to drain Greece of her best blood, and left to her insignificant and mediocre families an inglorious and decadent future.

In like manner Seeck connects the decline of ability among the Romans, and especially the notable decline in their courage and force of character, with the wholesale massacres of the Social Wars. Marius and Cinna murder the aristocrats and their personal enemies by thousands, Sulla extirpates the democrats with equal ferocity, and the remaining noble blood is spilled under the proscriptions of the triumvirs. All the bold were slain: only cowards remained alive, and from their progeny issued the timid, characterless generations of the Lower Empire that bewailed the passing of the old greatness and idly let the barbarians smash in upon them.

The most comprehensive and thorough examination of social selections thus far made is the work of Lapouge, who has not only surveyed the results of his predecessors, but has added many contributions of his own. All the alterations of the human breed that arise from social causes he groups under the six heads of military, political, religious, moral, legal, and economic selection.

Once war selected well, and on the whole assured the survival of the bravest, strongest, and most adroit. In civilized populations, however, war takes the pick, and

leaves the unfit to stay at home and propagate. The poor quality of the recruits that presented themselves in France in 1891 and in Germany in 1892 is due largely to the fact that they were begotten during the Franco-Prussian war, when the *élite* were in the field. In these days of machine guns, moreover, the battle no longer spares prowess, as it did in the days of spear or sword war, but mows men down indiscriminately.

Political selection is exemplified in the Revolutionary struggles, where the great men of France guillotined one another in turn, and only mediocrity thrived. In hardly any epoch has political contest been free from the shedding of blood; and even to-day the victors, while they respect the lives, do not spare the livelihoods of their office-holding opponents.

An example of moral selection is our exacting standard of decency, which by insisting on the complete covering up of the body reduces cutaneous respiration, and results either in a slow asphyxiation or in throwing more work upon the lungs. In Oceania, says Lapouge, tuberculosis and evangelization have advanced hand in hand. As the missionary imposes clothes on his converts, they begin to fall a prey to consumption, so that, as an English statesman declared in Parliament, the most rapid and effective means of clearing a Pacific island for colonization is not the demijohn or the rifle, but the gospel!

The cult of charity has worked regressively, keeping alive the unfit, assisting them to rear large families of their ilk, and even forming monstrous varieties of our species, such as the horrible *crétins* of the Alpine valleys.

Legal selection is instanced by punishment, which has been a selective agent of no mean order when we remember that the little England of Elizabeth hung eight hundred malefactors a year. Indeed, some have attributed the unusually low criminality of the British population to

this ferocious purging. To-day, however, punishment is so little eliminative that many advocate the sterilization of all congenital criminals as the only means of thinning out the bad breeds.

The most decisive influence of law is, however, in the matter of marriage. The institution of polygamy is a means of favorable selection, because it abstracts women from the inferior, and multiplies the descendants of the successful and well-to-do, who are able to support a *ménage* of several wives. In its natural form it handicaps the scrubs in favor of the thoroughbreds. In the approaching competition of Occidentals and Orientals, says Lapouge, the former, who limit the superior man to one wife, will carry a heavy handicap.

In viewing the selective workings of economic institutions, Lapouge shows himself as radical as Ammon is conservative. The struggle for wealth does not bring to the top the intellectual aristocracy. The emulative standards of plutocratic expenditure infect all classes save the poor, and cut down the size of the family. Inherited wealth shields its possessors from selective stress, and permits retrogression. The plutocracy of to-day is far, very far, he thinks, from favoring the multiplication of the best.

It would take long to name the faces that have turned towards this fascinating question of social selections. We have Dugdale and McCulloch and Warner, with their studies of maleficent charity; Reid, who argues that the intemperate peoples are the ones that have not undergone alcoholic selection; Ripley, who has amassed the facts bearing on climatic selection, and has shown the influence of "consciousness of kind" in controlling matrimonial choice; Pearson, who assesses the selective value of economic competition; and President Jordan, who has eloquently compared war and peace in their effect on the quality of the race.



The future, no doubt, belongs to the doctrine of selection. But, if the selectionists are to make headway, there must be a fuller recognition of social factors. The master error of the social Darwinists is to see in the economic struggle a twin to the "struggle for existence" that plays so fateful a part in the modification of species. The fact is, the scramble for money or place, though it be as desperate as the fight of clawed beasts, has ceased to be a clear case of life or death. Only on the bottom steps of the social staircase do men compete from hunger. Above them men work themselves into the madhouse or the grave, not for bread, but for jam on the bread. Starvation takes ever thinner shavings from the under side of society, while overfeeding is beginning to plane down the upper side. Beyond six hundred dollars a year, it is doubtful if pecuniary success has much influence on survival. The well-to-do, with all their high-priced doctors and trips to Florida, diminish very little their natural mortality rate.

What a difference between the gaining or losing a rung in the climb for comfort, and the situation Darwin found among animals and plants, where "a grain in the balance will determine which individual shall live and which die"! With animal life, where "of the many individuals of any species which are periodically born but a small number can survive," compare a modern society where half of the males that are born finish their forty-seventh year, and where those who work themselves to death to get the vanities of life probably outnumber those who perish from lack of its necessities.

If economic gradation does not register itself clearly in death-rates, still less can we read it in the birth-rates. The "rivalry of life," if it is not a mere struggle to survive, is certainly not a struggle to leave offspring. The victors could multiply, but they choose to take out their success in upholstery rather than in more babies. The



slums, on the other hand, are alive with infants, because the factory demand for child labor makes children an asset rather than a burden. Hence the well-to-do increase less rapidly than the poor. The professional, mercantile, and higher artisan classes have smaller families than the workingmen; and the fact that they rear a larger percentage of their children to maturity does not compensate for their lower marriage-rate and birth-rate. Moreover, this saving of infants by better care amounts, in many cases, to keeping alive the less fit.

The fact is, in the higher societies the "battle of life" is now of the Red Cross kind, and is little selective. It is hardly a struggle to exist, still less a struggle to reproduce, but chiefly a struggle to rise; and the winners are liable to be out-multiplied by the losers, and displaced by their progeny. At best, the net result of it all is not "the survival of the fittest," but *the promotion of the capable*. At worst, the outcome is a partial suspension of natural selection among the hereditarily rich.

For all the naturalists may say, the food quest, prime agent of selection among the beasts, is no longer the chief winnower of men. Clothes, stoves, cookery, firearms, and medicaments have, moreover, withdrawn us from some of the stresses that sifted the cave-men. But still Nature finds ways of getting her flawed pots to the shard-heap. Climate, that screens immigrants so mercilessly, continues to drop through the mesh a serious fraction of each generation. Microbes lay low the non-resistant stocks. The arrows of many diseases — though not all — fly selectively, striking down the inferior in physique. The accidents of life and the hazards of occupations snatch away the reckless and thoughtless. Drink and vice purge from the ranks those fierce of appetite and weak of will. Diet, regimen, personal habits, are so many means of casting out the stupid and imprudent.

The social selections are by no means of a stripe with

these natural selections. Nature eliminates the unfit: society eliminates the misfit. Nature rejects the defective: society preserves them, but burns the heretic and hangs the criminal. For the most part, though, the social selections do not eliminate anybody. They determine not who shall live, but who shall propagate the next generation. They select not survivors, but parents. Most institutions and policies that sift human beings do so by influencing one or more of the following factors: (a) the inclination to marriage; (b) the amount of marriage,—polygamy, monogamy, etc.; (c) the age of marriage; (d) the will to have children; (e) the ability to rear children to maturity. Social selections thus discriminate between men on the basis of their volitions, whereas Nature discriminates for the most part on the basis of their bodily traits or their instincts.

The theory of social selections will doubtless throw fresh light on the causes of the decadence of nations. Under the spell of the social organism analogy, the idea long prevailed that a society, like a human being, has its youth, maturity, old age, and death. But on further reflection it was seen that the hereditary necessity that impels the individual along the fatal path to dissolution arises from a special cause. Weismann showed that death strikes only multicellular organisms, and that the normal term of life for each species is fixed by natural selection operating upon innumerable generations. Societies, however, are not organisms, and do not lie under the sceptre of heredity. The size and term of life of each society depend upon present circumstances, not upon the conditions to which ancestral societies were exposed. It may perish under the heel of invading barbarians or in the throes of civil strife; but its end is a catastrophe, never a natural death.

Now, however, with the recognition of social selections,

the theory of national afternoons has been exhumed and set on its feet. Dimly we begin to discern why the career of a people is a parabola, why "every stone thrown must fall." As a society mounts to greatness, a growing civil, military, and ecclesiastical organization concentrates talent and creates brilliant centres of energy, attracting the capable, as lighthouses fatally attract birds. In camps, courts, cloisters, universities, and capitals the *élite* become incandescent, take fire, and feed the flame of civilization.

But meanwhile certain searching primitive tests of manhood have been done away with, survival and reproduction have been turned askew by artificial arrangements, and motives have been unloosed which blunt the race-preserving instincts of the fittest. The flower of the race is wasted in war, or trampled under in civil contests, or drawn to centres of intense civilization, where, a prey to wants and ambitions that interfere with breeding, it becomes glorious, but sterile, fecund in deeds, ideas, and graces, but not in children. When in time the eugenic capital is used up, we have a people no longer capable of matching the achievements of their sires. The very institutions that make a people great and happy may bring in at last a race decadence which presently announces itself in social decline.

There is a way pointed out by Dumont by which the historic triumphs of vigorous races are undone. As the fertile parts of a country like France are stricken with sterility under the fever of social ambition, currents of migration set up from the poor environments, the uplands and mountains. But these are inhabited by the beaten people driven aforetime from desirable areas by the invaders. The overflow from these poverty-stricken but fecund regions silently fills the gaps in the lowlands left by the extinction of the superior stocks. In this way the conquered revenge themselves, the progressive element is swamped, and the nation runs down like a clock with no one to wind it.

Perhaps the classic picture of over-ripe nations dropping to pieces from sheer rottenness is fanciful. Perhaps every Golden Age does not need to be paid for with a Silver Age. But the selectionists are beginning to divine how such *might* be the case. The possibility of accounting in this fashion for the passing of nations certainly lends a new interest to the records of the past and a fresh zeal to the philosophic historian.

It is likely that mere qualitative reasoning on selection has reached its zenith. Ingenious and fertile minds have gotten out of the idea about all there is in it as an easy solvent of hard problems. The next pressing task is not to hunt for new selective agencies, but to measure the relative importance of those already recognized,—to determine which are momentous and which trivial. The hour has struck to make variation and selection a branch of quantitative science, to put mathematico-statistical logic in place of the prevailing loose qualitative reasoning. We need significant facts,—above all the counting of numerous similar facts,—in order to advance further in the appraisal of social institutions. There is coming a new Darwin, who will spend half a lifetime in patiently collecting all facts that throw light on the siftings and screenings of human beings by social agencies. He will ransack history, engulf dictionaries of biography, cross-examine medical men, pry into family life, and digest the vital statistics of the globe in order to establish his facts. Then he will isolate and test one after another every policy and institution, every type of family, inheritance, property, religion, morals, charity, warfare, education, and social organization. And his calm exposé of its bearing on the relative increase of breeds and stocks will constitute either its supreme vindication or its final damnation, its acquittal or its sentence in the court of last resort.

In the course of two centuries, men have passed from

standard to standard in judging an institution. Is it ordained of God? Does it strengthen the State? Does it accord with human rights? Does it promote the increase of wealth? Does it conduce to the social welfare? To these successive standards, theological, political, ethical, economic, sociological, is added now the biological query, Does it favor the best breeds? This, as it heeds all the consequences of an institution, even the remotest, will constitute the final standard.

This mete-wand, by enabling us to compare the chief features of our own development with the corresponding features of other societies and times, affords a new and decisive test of the worth of social conditions and stages of culture. It yields a fresh appraisal of the cityward movement, of machine industry, of the emancipation of women, of the ascendancy of mode imitation over custom imitation. The formation of a leisure class, the growth of luxury, the spread of a feverish ambition into ever wider circles, the multiplication in the middle class of wants that interfere with the multiplication of human beings, the sterilizing of the intellectual *elite* by exacting standards of expenditure, the accenting of pecuniary considerations in matrimonial choice, the delaying of marriage among working-class girls by the opportunities of factory labor, the undermining of the family ideal by individualism,—all these phenomena that our double-quick social progress draws in its wake call for the yard stick of the selectionist.

Still more momentous is his revaluing of all social measures, policies, and arrangements. In this court of final appeal every ordinance, from the law of succession to the regulation of the liquor traffic; every institution, from slavery to primogeniture; every custom, from the marriage *dot* to coeducation; every social practice, from child marriage to the higher education of women; every tribunal from the Inquisition to the Hague Conference;

every historical movement from the Crusades to the expulsion of the Moors,— must stand or fall by the breed of human being it favors.

When you know what kind of people multiply most under it, you know whether it is good or bad ; for back of social questions lies the human question. With strong, wise, good men, any type of institution will do, because all are superfluous. Whereas a population of knaves, fools, and weaklings will turn heaven itself into an Inferno. Any practice or arrangement that sifts badly, keeping the chaff instead of the grain, catching the silt and rejecting the particles of gold, must be given up, be it never so hal-  
lowed.

On this coming day of judgment the granite of authority will melt like snow, the mortar of logic will turn to dust, "eternal" principles will vanish like the morning mist. For, if society englobes generations yet to be, no institution can come off scathless that hinders the well-endowed from outbreeding the ill-constituted and filling the earth.

This test may do much to end debate and unify opinion on social questions. Into the profitless discussion of measures from the standpoint of particular interests the sociologist has thrown the question, "Is it best for society as a whole?" But society is a vague entity, and each disputant deems his own class the backbone of society. The selectionist in turn seeks to lift the plane of discussion with the question, "Will it tend to the preponderance of the fittest?" For cases where it can be applied, perhaps his touchstone will be adopted sooner than that of the sociologist. Most of us are hazy as to the social welfare ; but every one knows and prefers the hale to the sickly, the wise to the foolish, the noble to the base.

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## PRESTIGE VALUE.

"ALWAYS and everywhere," says Professor Clark, "there is present to the mind that makes a valuation, the conception of a concrete thing, of a quality of that thing, and of the quantitative measure of that quality." The concrete thing is that which satisfies a want, or what is called a good. The quality of the thing that renders it capable of satisfying a want, that makes it a good, is its usefulness, or utility. As some goods are more useful than others, usefulness is a question of degree. It is consequently necessary to employ some quantitative measure to indicate the degree of utility. This is the function of value. Thus value, according to Clark, "is the quantitative measure of utility," or, to borrow Wieser's phrase, "value is the calculation form of utility." Not the measure or calculation form of absolute utility, however, as this in the very nature of things is immeasurable and incalculable, but the measure or calculation form of effective, or what is more familiarly known as marginal, utility. In the generic, therefore, value may be defined as the measure of marginal utility.

Now utility implies a relation between man and his economic environment, between want and the possibility of satisfaction,—in a word, between demand and supply. Or, to define the situation more precisely, we may say, with Professor Tuttle, utility expresses the qualitative weal-relation between man and his economic environment. It is accordingly the function of value to measure this qualitative weal-relation in quantitative terms. Furthermore, as we are dealing with a relation, the measurement must be made from both ends,—from the subjective standpoint of human wants and from the objective standpoint of economic goods. Thus, regarded subjectively, value indicates the importance a person attaches to the possession of a good for any particular purpose; while, objectively considered, value expresses the capacity or power the good possesses to fulfill such purpose.

However deflected, or even distorted at times, well-being is



the ultimate goal of man's economic activities. For whatever special reason we attach importance to the possession of goods, or to whatever particular purpose the goods themselves are applied, in last instance all our valuations are made with reference to well-being. In the generic, therefore, value regarded from the subjective side indicates the importance a person attaches to the possession of a good with a view to augmenting his well-being; and value regarded from the objective point of view indicates the power or capacity of such good to minister to a person's well-being.

Within this generic concept, however, are contained particular kinds of value, or modes of valuation. This is the case because there are different kinds of utility to be measured, as well as different degrees. That is to say, not only are some goods more useful than others, but, furthermore, the self-same good may be put to different uses. Aristotle was the first to recognize the significance of this fact, and instanced at least two uses to which one good might be put. "Of everything we possess," said he, "there are two uses: both belong to the thing as such, but not in the same manner; for one is the proper, and the other the improper or secondary, use of it. For example, a shoe is used for wear, and is used for exchange: both are uses of the shoe. He who gives a shoe in exchange for money or food to him who wants one does indeed use the shoe as a shoe; but this is not its proper or primary purpose, for a shoe is not made to be an object of barter." What, then, in this instance, is the effective or marginal utility of the shoe, wear or exchange? It depends upon the point of view. Regarded from the consumer's side, shoes are certainly made to wear; but from the producer's standpoint shoes are also made to sell. Wear is without doubt the primary use, for the wearing of the shoe ministers directly to the wearer's well-being; but exchange is evidently a secondary use, for selling the shoe contributes indirectly to the seller's well-being. The two utilities might possibly be reduced to a common denominator, and the final utility of the shoe expressed in terms of well-being; but such is not the usual procedure. For practical purposes two measures of utility are employed, one for the consumer and one for the producer. Or, as Adam Smith said, "The

word *VALUE*, it is to be observed, has two different meanings, and sometimes expresses the utility of some particular object, and sometimes the power of purchasing other goods which the possession of that object conveys. The one may be called "value in use"; the other, "value in exchange." Applying the general formula, then, to these particular modes of valuation, use value and exchange value may be defined as follows: Subjectively considered, use value indicates the importance a person attaches to the possession of a good for the satisfaction of an immediate want; while, objectively regarded, use value expresses the power or capacity of the good to satisfy such want. Similarly, exchange value, subjectively considered, indicates the importance a person attaches to the possession of a good for the purpose of purchasing other goods; and, objectively regarded, exchange value expresses the capacity of the good to obtain other goods on the market, or, more simply, the purchasing power of the good.

All this is familiar enough, and merely presented by way of introduction. My purpose in this paper is to consider a third form of value, which, though generally recognized, has not to my knowledge been dignified by a name. Between use value and exchange value I wish to interpolate the term *PRESTIGE VALUE*, and show, first, the logical and, next, the historical justification for the addition.

In order to establish this third form of value, it will be necessary to go back over the argument and make a further analysis of the different kinds of utility. The word "use" chosen by Aristotle, continued by Adam Smith, and recently re-established by the Austrian school of economists, is ambiguous. In a broad sense, all goods are made to use. Use is, in short, the ultimate purpose of goods, since it is through the use of goods that well-being is secured. Nevertheless, within this general category there are different kinds of uses to which goods may be put, each of which ministers in its particular way to well-being. Personal use is one of these; that is to say, goods may be used to satisfy immediate wants. Shoes, to take Aristotle's example, are used to wear. Exchange is another, a secondary use, to be sure; but still, as Aristotle said, exchange is certainly a use of the shoe. Now

the question I wish to raise is, Are these two the only uses to which goods can be put? As far as shoes and such commodities are concerned, yes. If perchance one possesses more shoes than one can wear (the number is limited, though the Empress Elizabeth is said to have possessed five thousand pairs), there is nothing one can do with the extra pairs but barter them for other goods; and, if exchange is impossible, such surplus commodities can only be cast aside or given away. But there are other goods, "both lasting and scarce and so valuable to be hoarded up," as Locke defined them, which one likes to accumulate beyond the point of personal consumption, even though one has no thought of exchange. To instance a few examples, cattle and land served this purpose in the past, precious stones and metals have always been hoarded up, and nowadays men accumulate collections of various kinds of curious things. But if not devoted to immediate consumption, nor necessarily employed in exchange, of what use are these goods? in what way do they minister to well-being? To answer this question, we must shift our standpoint, and approach the problem from the subjective side.

Goods are used because satisfaction is derived therefrom. Personal use affords direct satisfaction,—the satisfaction of immediate consumption. Exchange, on the other hand, affords indirect satisfaction; that is to say, the good that is sold affords satisfaction only through the acquisition of the good for which it is exchanged. Now, if these were the sole satisfactions to be derived from the use of goods, then exchange would be carried on only to the extent necessary to satisfy the immediate wants of the exchangers. One would buy and sell, in other words, only in order to consume; and, when one's immediate wants were provided for, one would cease to exchange, or retire from business, as the modern phrase goes. But this is not the custom of the commercial world. Man is, of course, in first instance a consumer, and, therefore, in normal circumstances, also a producer. As soon as his immediate wants are satisfied, however, the ordinary individual usually desires to become a proprietor. This end was formerly reached through production alone, but in modern circumstances the process is facili-

tated by exchange. As a result, man is not nowadays an exchanger simply because he is a consumer, but more particularly because he desires to become a proprietor. The fact is, one of the main motives making for industrial progress consists in what Mill called "the effective desire of accumulation." If not from the first, at least from very early times, man has been impelled to economic activity by his apparently insatiable desire to accumulate wealth, to become the possessor of property, and be accounted rich among his fellows. This "prestige of proprietorship" is no doubt an outgrowth of the instinctive desire to satisfy one's immediate wants; but in the course of time it has become so differentiated as to constitute a distinct ideal, an additional spur to economic activity,—so much so, indeed, that proprietorship may be considered a separate source of satisfaction, to be distinguished, on the one hand, from the immediate satisfaction of personal consumption, and, on the other hand, from the mediate satisfaction derived indirectly through exchange.

If, then, satisfaction is derived from the mere possession of property, from the sheer sense of proprietorship, there are evidently three uses to which goods can be put, and not simply two, as Aristotle and Adam Smith supposed. Goods may be used, in the first place, to satisfy immediate wants; goods may be used, in the second place, to augment the prestige resulting from proprietorship; and goods may be used, in the third place, to purchase other goods on the market. Furthermore, the goods acquired through exchange may in turn be devoted to immediate consumption, to proprietorship, or to further exchange, as circumstances suggest. If they are devoted to further exchange, then again the goods thus acquired may be devoted as before to immediate consumption, proprietorship, or still further exchange; and so on indefinitely, increasing consumption and expanding proprietorship continually stimulating exchange.

Whether goods be devoted to immediate consumption, to proprietorship, or to exchange, their utility in each instance is a question of degree, and can consequently be measured in quantitative terms. The marginal utility of goods devoted to immediate consumption is measured by use value: the mar-

ginal utility of goods for sale on the market is measured by exchange value. What, then, of the marginal utility of goods accumulated for the sake of proprietorship? This utility also is measured. But, as I said at the outset, though the standard has long since been accepted, prestige value has not as yet been separately defined. It is not a difficult matter to define, however; for the facts of every-day life, as well as the records of history, all go to substantiate the term. With a view, then, to distinguishing this third measure of utility from the other two, we may begin by applying the general formula, this time to the concept of prestige value.

Subjectively considered, prestige value indicates the importance a person attaches to the possession of a good not primarily for immediate consumption, nor again for the purpose of exchange, but simply for the sake of proprietorship. Importance is attached to the possession of the good in this instance not because the proprietor desires to use the good himself to satisfy an immediate want, nor because he wishes to purchase other goods therewith on the market, but rather because he hopes by the possession of the good to raise his social position, to add to his dignity, or augment in any way his prestige. For example, the patriarch of old gloried in the number of his herd, the mediæval proprietor prided himself upon the extent of his estate, and nowadays the millionaire derives similar satisfaction from the contents of his security box. In such cases it is neither the exigencies of consumption, nor the "propensity to truck, barter, and exchange" that determines value, but the importance of proprietorship and the prestige that it brings. So, likewise, the well-to-do farmer, or the successful mechanic, sets store by his front parlor, with its lace curtains, its organ, its parlor suit, not because — on Sunday evenings, perhaps, excepted — he uses the room (during the rest of the week he lives in the kitchen, "apart from his furniture," as Meredith so quaintly expresses it), not because he has any thought of disposing of its contents, but simply because such surroundings indicate a distinct standard of life and establish his prestige among his neighbors. Cowboys set store by their expensive outfits, consisting of fine felt sombreros, high-heeled boots, and ornate saddles; scholars

attach importance to their various degrees; officers value their multitudinous titles and orders. These, and other goods too numerous to mention, possess value, not because they can be exchanged, but because their possession implies power.

Regarding the concept from the objective side, prestige value expresses the capacity of certain goods to contribute in this way to a person's prestige. It is not necessary, however, to think of a distinct class of goods that possess prestige value alone. Value is merely a circumstance of things, and one or more of its forms may perfectly well adhere to the same good. That is to say, as one good may possess several qualities of satisfying wants, so these several qualities may be differently measured. The shoe, to use the same example, since it may either be worn or exchanged, possesses both use value and exchange value. In the same way prestige value may adhere to goods that possess use value and exchange value, or it may be a circumstance of things that have no value on the market, or again, in some few cases, prestige value may prevail by itself.

From the fact that proprietorship is, after all, an indirect use of one's possessions, it follows that goods that possess prestige value usually possess use value as well. But this is not necessarily the case. Collectors, for instance, attach importance to the accumulation of practically useless things, such as cancelled stamps, old coins, and the like. So also the South Sea Islander prides himself upon the number of human heads he has stuck up about his abode, and the American Indian glories (or once gloried) in the number of scalps that swing from his belt,—not because heads and scalps in this detached state are of any immediate use, but because their possession adds to the warrior's prestige. But, for the most part, it can be said proprietorship is not extended over things that have no independent use value. True, a very small portion of the proprietor's possessions may be immediately used by the proprietor himself. The patriarch, for example, enjoyed but a small fraction of the product of his herd, and the feudal lord consumed but a portion of the produce of his estate; the remainder in both instances was devoted to the support of dependents, vassals,

retainers, and the like, because an entourage of such sort established the proprietor's prestige. And in our day, too, many multi-millionaires, though they surround themselves with luxuries of all kinds, find it difficult to spend their incomes on themselves. Hence the growing custom of applying the surplus to the improvement of social conditions by founding libraries, endowing hospitals, and establishing educational institutions. Such outlays, in the form of liturgies, were compulsory in ancient Greece, and are becoming in a way demanded by public opinion to-day. Then, as now, public endowments indicated a man's position in the world and established his prestige among his fellow-citizens. Without pursuing further this phase of the subject, the following conclusions seem plain: that, with the growth of property, prestige value attaches itself in the first place to goods that possess use value; and that, while still adhering for the most part to such goods, proprietorship soon becomes of importance in itself because of the growing prestige that the possession of property affords.

Whether goods that possess prestige value also possess exchange value depends entirely upon circumstances. Exchange value is at all events not a necessary incident of prestige value. In modern commercial societies, it is true, most goods that go to establish a man's prestige are also on the market,—with the exception, of course, of dignities, honors, orders, titles, degrees, and the like,—though there are lamentable instances of these being bought and sold. Still, the modern adage, "Everything has its price," does not even to-day apply to quite all our possessions. We all attach importance to the possession of articles we do not use, which we could not sell if we wanted to, and which we would not sell if we could. These goods, as every one knows who has seen an estate auctioned off, possess little or no exchange value; but of their prestige value to the original owner there can be no manner of doubt. But the point is better proved by turning our attention to the past. Before commercial societies were established, proprietors certainly existed who prided themselves upon their possessions. Nowadays, to be sure, cattle come on the market, and even ancestral estates are sometimes put up for sale. But these are



modern phenomena. In former times, and in some parts of the world to this day, neither herds nor land possessed exchange value. To ask a landed proprietor of the old school how much he would take for his estate would be to offer him an insult. Indeed, to the typical proprietor the very thought of exchange was distasteful. Witness, for example, Aristotle's stigma on retail trade, merchants, markets, money, usury, and the like; or the scornful attitude of the feudal barons to the Jewish merchants and money-lenders of the Middle Ages; or, again, the antipathy of the Southern planter towards the Yankee trader. Still, all these proprietors prided themselves upon the extent of their property, and attached importance to their possessions because of the prestige they afforded. It is evident, therefore, that prestige values may prevail, and for a long time actually did prevail, where exchange values were either unknown or entirely subordinate.

Therefore — going makes it clear — does it not? — that in our valuations we are in the habit of employing three separate standards,—use, prestige, and exchange; that, as there are three more or less distinct uses to which goods can be put, or three kinds of utility, so there are three more or less definite modes of measuring such utility, or three kinds of value. To sum up the situation so far as we have gone, regarding the series from the subjective side, men may be said to attach importance to the possession of goods for three reasons,—for the satisfaction of immediate wants, for the prestige of proprietorship, and for the purpose of exchange. Or, regarding the series from the objective side, goods may be said to possess three kinds of economic power,—the power of satisfying immediate wants, the power of contributing to prestige, and the power of purchasing other goods on the market.

From the instances offered by way of illustration, it should also be evident that concomitant circumstances determine the particular forms of value that adhere to goods, or the different modes of valuation applied. Use values prevail in all circumstances,—in all circumstances, at least, that are economic. Man must always see to the satisfaction of his immediate wants. Whether he be an isolated producer or a mere unit of a complex social organization, he will, if the supply be



in any way restricted, always attach importance to the possession of such goods as satisfy his immediate wants. But, for prestige values to arise, man must live in some sort of community with his fellows. He will not be inclined to accumulate goods beyond his immediate wants unless such accumulation contributes to his prestige; and this can only occur where there are dependents, associates, or at least neighbors, to be impressed by the extent of his possessions. Finally, for exchange values to appear, there must be more than a mere community. The society in which man lives must have become differentiated. There must be what Adam Smith called division of labor, or what Mill spoke of as the separation of employments; for only in such circumstances is the market established and money introduced to indicate the amount of exchange value. Thus exchange value is not a phenomenon of society in general, but of commercial society only.

To set in relief the clear-cut distinction between these three kinds of value, each of us has only to conceive himself in different sets of circumstances. In every-day life it is difficult for us to classify our possessions according to the kinds of value they acquire; for use value, prestige value, and exchange value overlap. But, if we think of ourselves beyond the reach of exchange,—in a beleaguered city, for instance, from which commerce with the outside world has been cut off and internal trade prohibited by military orders,—we recognize at once that we should only attach importance to the possession of such of our goods as satisfied our immediate wants and kept up our established position among our townsmen. That is, exchange values would be eliminated under such conditions, and only use values and prestige values would remain. Or, if we place ourselves in fancy isolated from our social surroundings, with our guide in the heart of the forest, for instance, or, like Crusoe, alone with our man Friday on a desert island, it is clear we should only attach importance to the possession of such goods as ministered directly to our wants. In this case, prestige values would disappear, as prestige depending upon wealth would be ridiculous with no one to be impressed with our grandeur; and use values alone would remain.

The natural sequence of the three forms of value is suggested by following the development of the several concepts in our own minds. We may not be able to recollect the purely use value stage of our careers; but observation of infants who cry for their food, or appeal to our parents, will convince us that there was a time in our lives when we attached importance to the possession of goods simply because they satisfied our immediate wants. The proprietary period is well within the memory of all of us, when as boys we prided ourselves upon the possession of marbles, tops, knives, stamps, and a miscellaneous collection of odd and curious things that established our prestige among our playfellows. Or, if recollection fails to visualize this interesting stage of our career, a perusal of the immortal pages of *Tom Sawyer* will serve to refresh our memories. Girls also pass through this stage, only their collections are differently constituted; and, indeed,—except in this land of ours, and even then only in some few cases,—most women remain upon the prestige stage, and have but the dimmest conception of exchange values. But with men it is different. As they are thrown out into the business world and meet other men in the market-place, they soon learn to realize the “value of money,” and from contact with the constant competition of buyers and sellers rerate their possessions in terms of exchange value and set a price upon almost everything they own.

If the life of the individual may be taken to be an epitome of that of the race, it would seem that the three forms of value succeeded each other during the course of industrial development in the order named. This can be shown to be the case by referring to the facts. Indeed, were the question merely one of analysis, it would be scarcely worth while to distinguish between the three forms of value, for each can be rated ultimately in terms of well-being; and, besides, under existing conditions, money, the standard of exchange value, serves in its way to measure use values and prestige values also,—even to the extent, in damage suits, of measuring the value of life and limb. In truth, the real significance of the three forms of value is historical: it is the sequence of the concepts rather than their logical distinction that is of impor-

tance. But so many pages have already been devoted to the analysis that I shall merely indicate by a cursory survey of the course of industrial development the natural order of the evolution of value.

So far as use values and exchange values are concerned, the historical sequence has long since been recognized. Aristotle, Adam Smith, and other writers have already pointed out that use values come first in time, and that exchange values are a later development.

Thus, according to Aristotle, there are two kinds of economies, which in the ordinary course of events succeed each other: the "natural economy," in which use values predominate and every one produces what he himself needs; and the "unnatural economy," in which exchange values prevail and one person produces what another person needs. The transition from the simpler to the more complicated economic system was effected, he said, through the growth of barter, which in turn was derived from the separation of employments. As exchanges multiplied in number and increased in extent, it was found convenient to adopt a common measure of value and medium of exchange. The precious metals were everywhere employed for this purpose, their value being first determined by size and weight and then stamped on their face as coin to pass henceforth by tale. In this way retail trade was established, which Aristotle defined as "the art of producing wealth, not in every way, but by exchange. And it seems to be concerned with coin; for coin is the beginning of exchange, and the measure or limit of it. And there is no bound to the wealth which springs from this art of money-making." Subsequent investigations have substantiated Aristotle's conclusions. Sporadic instances of barter are, as he said, to be discovered among many savage people. Indeed, even as far back as the stone age we find evidences of stations for the exchange of certain commodities, such as flint, shells, salt, and so forth. But such exchanges, being solely for the purpose of immediate consumption, led to no development of exchange values. Among the barbarian nations which later controlled the inland countries — the Scythians and Tartars of Asia, the Aztecs and Incas of America, the European conquerors of the Dark Ages —

exchange was likewise for many centuries of minor importance, being carried on for the most part by foreign merchants, who penetrated into the interior from commercial centres established upon the seacoast. It was here, as Adam Smith remarked, "upon the seacoast and along the banks of navigable streams that industry of every kind naturally began to subdivide and improve itself, and it was frequently not till a long time after that these improvements extended themselves to the inland parts of the country." To mark the beginnings of exchange values, we must consequently look to the commercial centres of the south, and, so far as Western civilization is concerned, in particular to the cities established along the Tigris and Euphrates valley and around the Mediterranean seaboard. Markets were established in these centres; and, with the development of trade, handicraft became freed from its feudal filiations, to be carried on henceforth by independent colleges and guilds. Money was introduced, and production for exchange became an established fact. To follow this transition in detail would carry us too far afield. Suffice it to say that these historical facts — the separation of employments, the institution of the market, and the use of coined money — mark the introduction of exchange values into Western civilization. The development of the concept may consequently be taken as coincident with the rise of what is known as the Commercial Era of industrial development.

Is it possible to go still further back and separate prestige values from use values in a similar way? Assuredly, only another series of historical phenomena must be taken into account. For prestige values to arise, there must, as I have said, be some sort of social organization. But this of itself is not enough. Prestige value is not as old as society itself. Within the society there must besides be something "both lasting and scarce, and so valuable to be hoarded up," — one or more commodities the accumulation of which is advantageous. In the earliest communities there were few commodities of this kind, for the simple reason that natural resources were free, and almost all articles freely reproducible by labor alone. Goods being acquired mainly for immediate consumption, their utility declined rapidly with accumulation. More than

enough for immediate consumption might of course be produced; but, since any one could by his own labor increase his supply, no special prestige attached to the possession of a surplus. In these early days, therefore, men worked enough to satisfy their immediate wants as far as possible; but there was little or no motive making for the accumulation of wealth, property contributing next to nothing to their prestige. Under such conditions, men were respected for their capacity rather than for their possessions. The hunter, for instance, acquired prestige, not from the number of his implements of the chase, but for their quality and for the skill with which he used them. And so it was in regard to the accumulation of things in general. Extra huts, supplies of blankets, surplus food, and so forth, except in exceptional circumstances, added next to nothing to primitive man's prestige, inasmuch as his fellows, if they chose to exert themselves thus unnecessarily, could secure a similar supply. In primitive times there were very few things "both lasting and scarce, and so valuable to be hoarded up." In fact, wives, slaves, trophies, and ornaments about sum up the list. Furthermore, as wives and slaves were, under the then existing conditions, only to a limited extent self-supporting, even their utility declined as their numbers increased. As a result, trophies and ornaments alone were really worth while accumulating; and, as these articles could only be applied to the decoration of the person and the abode of the possessor, their number was likewise limited. On the whole, therefore, in what philosophers have called "the natural state," or what we know as the condition of savagery, both prestige values and exchange values were practically at a minimum, and use values predominated.

With the appropriation of natural resources for pastoral and agricultural purposes the situation was essentially changed. The herd constituted a monopoly good from the start, as domestication took time; and, where agriculture could only be carried on in certain localities,—along irrigated valleys, for example, in oases, or about the shores of lakes,—land, too, became a monopoly good. Those in possession of domesticated herds or cultivated fields consequently acquired an advantage over those who had only their labor to rely on. Indeed, as

appropriation proceeded, the monopoly advantage became such that the proprietor was in a position to compel the non-owner to labor for him on the upkeep of his property. From the proceeds of his estate he could henceforth live in luxury and support slaves, vassals, retainers, and wives without any extra burden of production falling to his share. And, as a further result (of importance from what will follow), articles of adornment might be put to far more extensive uses in the form of treasure in accentuating the grandeur of his estate. The larger the patriarch's herd or the more extensive the landlord's estate, the greater the prestige of proprietorship and the more powerful his position in the world. Not to go any further into details, it is evident, therefore, from what has been said that the appropriation of natural resources for pastoral and agricultural purposes — which is also a well-authenticated historical fact — gradually introduced a new economic era, which, because characterized by the prestige of proprietorship, may be spoken of as the Proprietary Period.

Thus by taking these two series of historical phenomena into account (first, the appropriation of natural resources for pastoral and agricultural purposes, and, second, the separation of employments, the institution of the market, and the introduction of coined money), the course of industrial development may be plotted off into three sections, — the natural state, the proprietary period, and the commercial era, each of which is characterized by the prevalence of a special form of value. In the natural state, use values predominated; during the proprietary period, use values were supplemented by prestige values; when the commercial era was instituted, exchange values also entered in. Coming last in the list, and not second, as Aristotle supposed, exchange values served to supplement prestige values as much as, if not more than, use values. That is to say, the proprietary instinct being by this time fully developed, the rising class of merchants entered into commerce not so much to satisfy their immediate wants as to increase their possessions, and so rival in wealth and importance the older class of landed proprietors. Success, it may be said, has everywhere attended their efforts, until in our day exchange is no longer the by-path, but the high road to social position and personal and political prestige.

Two further points may be referred to in conclusion: first, the effect of proprietorship in establishing the existing standard of value; and, second, the effect of proprietorship in determining the modern medium of exchange.

In the generic, value measures the amount of well-being to be derived from the consumption of goods under the particular conditions of demand and supply; or, to revert to Clark's definition, value is the measure of marginal utility. Now, to measure anything in quantitative terms, some standard must be employed in units of which the amount measured may be expressed. For the measurement of extension we have the standard foot, yard, mile, etc.; for measuring weight, the ounce, pound, ton, etc.; for measuring capacity, the quart, gallon, bushel, etc. What, then, is the standard of value, and in what units may its amount be expressed? As, in last instance, value measures the weal-relation between man and his economic environment, well-being must be accepted as the ultimate standard. But the difficulty is, well-being of itself is not immediately measurable. True, one may indicate the general amount of well-being: one may say, for example, "I have had a good time, a mighty good time," or even "an awfully good time"; but one cannot state just how much well-being,—one cannot say for instance, I have had a ten, fifteen, or twenty good time! There is, however, an indirect way out of the difficulty. One may choose some standard commodity that normally and regularly contributes to human welfare, some good whose utility is at all times and to all persons about the same, and express the amount of well-being in its terms.

These conditions confine the choice of the standard to a certain class of commodities. Goods that possess use value alone are excluded for two sufficient reasons. In the first place, use values are particular and individual: what is valuable to one person may not be valuable to another. All depends upon the individual conditions of demand and supply. Then, again, as use values measure the utility of immediate consumption, they decline very rapidly with every increase of supply, and are therefore not the same even for one person at all times. In short, the marginal utility of goods devoted to immediate consumption varies extremely from individual to



individual, and also in the case of one individual from one time to another. Consequently, no commodity that possesses use value alone can be accepted as a standard.

With goods that possess prestige value it is different. Any one of these may be chosen as a standard, for the reverse of the two reasons that excluded the purely use value commodities. In the first place, prestige values are not particular and individual, but general and social. All the members of any community attach about the same importance to the possession of the goods that contribute to social prestige; and those goods, consequently, possess the power of contributing about equally to every one's prestige. In fact, as far as the sheer possession of property is concerned, man has long since shown himself to be an insatiate; and so, unlike goods devoted to immediate consumption, proprietary goods maintain their value under accumulation. In short, prestige values in any community do not vary much from person to person, nor for one person do they vary greatly from time to time. Therefore, any commodity that possesses prestige value may perfectly well be chosen as a standard.

Turning to the historical facts, we shall find these were just the commodities selected for the purpose. In the natural state, as we have seen, there were few commodities whose accumulation was advantageous because of the prestige they accorded. When natural resources were free, and no one possessed any monopoly advantage over his fellows because of his property, production was limited by the demands of immediate consumption, and utilities declined very rapidly with accumulation. As long as — or more properly, perhaps, to the extent that — such conditions prevailed, the notion was but slightly developed in men's minds that the mere number of goods in a man's possession measured the amount of his well-being. Only after the appropriation of natural resources for pastoral and agricultural purposes did this concept become an active and dominant one. Henceforth the accumulation of certain commodities was advantageous because of the prestige they accorded. Thus, as monopoly advantages were acquired in domesticated cattle and cultivated fields, the control of a large herd, the possession of an extensive estate, the



maintenance of a numerous household, and the accumulation of treasure, all added to the proprietor's prestige and so augmented his well-being. Nor, indeed, did the utilities of these goods decline, except very slowly, with an increase of supply; for, generally speaking, the larger the herd, the more extensive the estate, the more numerous the household, and the richer the treasure, the greater the prestige of proprietorship. Furthermore, as such prestige was essentially social, every one recognized that the goods in question possessed this power of contributing to one's welfare and attached importance to their acquisition accordingly. As a result, the goods that possessed prestige value came to be taken as standards wherewith to measure the amount of well-being. Insomuch that during the proprietary period we find utilities measured and values expressed in terms of cattle, land and the produce thereof, slaves, and the precious metals. To be convinced of this, we have only to refer to the Old Testament or turn to the pages of Homer. During the Dark Ages in Europe the same system was employed, and even in our own country the Southern planters reckoned their wealth and welfare in this way. So, taking the logic of the situation together with the facts as they are recorded, we shall not go far astray if we say that it was the development of the proprietary concept, resulting from the appropriation of natural resources for pastoral and agricultural purposes, that led to the establishment of the commodity standard of value.

With the introduction of the commercial era a new requirement became apparent. Not only was it as advantageous as before to have a commodity standard of value, it was furthermore necessary to adopt a commodity medium of exchange. In disposing of their surplus, men might very well have begun during the days of barter by accepting in return commodities that satisfied their immediate wants, "giving and receiving wine, for example, in exchange for corn and the like." But, as Aristotle added, "this sort of barter is not part of the money-making art, and is not contrary to nature, but is needed for the satisfaction of men's natural wants." When retail trade was established,—that is to say, when merchants exchanged and craftsmen produced for a profit,—these industrialists were

less inclined to accept in payment for their wares commodities that possessed use value alone; for, as their business prospered, the utility of the miscellaneous goods thus received must inevitably have declined with accumulation. To be sure of receiving full value in exchange, they naturally insisted on being paid in commodities whose utility was not likely to decline and whose value was generally recognized. Thus, in selecting a medium of exchange, commodities that possessed use value alone were excluded, and the choice was confined to the list of goods above referred to that possessed prestige value. Within this list, however, it was convenience that determined the choice. To serve as a medium of exchange, the commodity had to be divisible into small amounts without destroying the value of the individual units. This necessity excluded cattle, land, and slaves, and practically confined the choice to grain and the precious metals. Of these two commodities only the latter carried high value in small compass. It was for this reason, therefore, that the consensus of commercial opinion finally decided upon the precious metals to serve as the commodity standard of value and the commodity medium of exchange.

Much of this is familiar, too familiar, indeed, to call for further comment. The only point to be established — and I believe the point worth making — is that the precious metals were chosen to serve as standards of value and media of exchange, not, as so many have affirmed, because they were useful and at the same time convenient for the purpose (in fact, however convenient, if the precious metals were merely useful in the narrow sense of satisfying immediate wants, they could not have served as standards at all), but because they possessed prestige value. Long before the commercial era began, the precious metals, along with cattle, land, grain, slaves, and treasure of other sorts, served as standard commodities in terms of which the amount of well-being might be measured. Of this group of goods they were the ones found to be adapted to the further requirements of a medium of exchange, and they were accordingly selected for the purpose. Thus, though convenience undoubtedly entered in to determine the choice of the precious metals, the list of available commodities was already

limited to the few goods that had come to possess prestige value.

We might go further and show that, though exchange values can perfectly well be rated thus in terms of prestige values, they might also be rated in terms of an ideal unit of purchasing power without reference to any particular commodity. Indeed, with the development of the modern credit system, the dollar, though it still means, in last instance at least, so many ounces of gold, is gradually becoming idealized in this way into an abstract unit of purchasing power. Thus in the end, no doubt, instead of exchange values being rated as before in terms of prestige value, prestige value will be rated in terms of exchange value, or in ideal units of purchasing power. But such a study is beyond the immediate mark. My purpose in the present paper has been simply to establish the concept of prestige value.

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## THE FUNCTION OF THE BANKER.

THE function of the banker, though one of the most important in modern society, is only imperfectly understood, even by many bankers themselves. This function is similar to that of modern means of transportation in seeking to accomplish the largest volume of results with the greatest saving of effort. The use of money is a long step in the economy of effort and in making easy the exchange of goods. The function of the banker lies in economizing the use of money, and therefore in further diminishing the cost and effort of exchange. This much is fairly well understood; but there are few probably, even among those who have given some thought to the subject, who have given a satisfactory answer to the question in just what manner the banker serves the community.

The definition of the banking function itself offers one of the first difficulties in the discussion of the subject, because of the great variety of services rendered by banks and the different classes of banking institutions among which these services are distributed. Professor Dunbar declares that "a bank may be described, in general terms, as an establishment which makes to individuals such advances of money or other means of payment as may be required and safely made, and to which individuals intrust money or the means of payment, when not required by them for use."\* A more precise definition is given by a French law writer, M. Gautier, as follows:†—

Taken in its general acceptance, the word "bank" expresses among us to-day the business which consists in effecting on account of others receipts and payments, buying and selling either money of gold and silver, or letters of exchange and drafts, public securities, and shares in industrial enterprises,—in a word, all the obligations whose creation has resulted from the use of credit on the part of states, societies, and individuals.

\* *Theory and History of Banking*, p. 9.

† Article "Banque," in *Dictionnaire du commerce, de l'industrie, et de la banque*, t. 404.

Of these many functions of the modern banker, those with which this article is concerned are those which relate most directly to the circulation of money. The employment of capital for long terms influences much less the operations of the money market and the supply of currency than do the operations of banks of deposit and discount, which are loosely called commercial banks, because they deal in the obligations of manufacturers and merchants maturing within short periods.

Banks of this character are essentially dealers in money. Money represents stored purchasing power. It is a commodity interposed between the commodities one sells and the commodities one buys. Banking credit represents stored purchasing power in the same way as money. But it is a question which has undoubtedly puzzled many thinkers, Where are the present goods which this purchasing power represents? How can real purchasing power be stored in the intangible form of entries on a banker's books? Is such purchasing power in the possession of the depositor a draft upon the future or only a title to existing goods?

The answer to these questions will best be found by proceeding from the most simple phenomena in banking to the more complex. The simplest form in banking is that represented by the system of the Bank of Amsterdam, where against every paper obligation which was issued by the bank actual metallic money was held. In the proper sense of the term, credit did not enter into the operations of the Bank of Amsterdam. The man who had a deposit there was the actual possessor of the quantity of silver which was represented by his deposit receipt. The bank held the silver as a matter of convenience, and delivered to him a warehouse receipt for its safe keeping. These receipts passed from hand to hand in the settlement of transactions, but it was known that the entire amount of silver which the receipts purported to represent was actually held in the vaults of the bank. The holders of the receipts might have kept in their own counting-rooms and vaults the silver which the receipts represented and paid it over in kind when they had an obligation to discharge. The deposit receipts issued by the bank simply afforded a convenient means of transferring this silver from hand to hand without physical

delivery. They corresponded to the gold and silver certificates now issued by the government of the United States, secured in full by deposits of coined metal.

A more complicated step in the development of the functions of the banker was taken when he took the risk of lending a part of the money against which he had issued deposit receipts. When a banker thus loans his deposits, he transfers to the borrower the stored command over commodities which money represents. In the simplest form of this operation he would simply hand over to the borrower the metallic money which he received on deposit. This money in the hands of the borrower would give to the latter the power to command commodities which had belonged originally to the depositor and was transferred by him to the bank. The function of the banker in this case is to so manage his use of the metallic money representing command over commodities as to have it ready at all times for those who have need for it. The banker binds himself by his deposit receipt to provide money for the depositor whenever the latter calls upon him for it. It is his function to study the conditions of the market and the average needs for money in such a way as to be able to adapt his operations to the calls from both borrowers and depositors which are to be made upon him.

Mere mechanical convenience is the principal element in the operations of such an institution as the Bank of Amsterdam. Such an institution, so long as it did not lend or advance money, did not reduce the total demand for metallic money in the community, but did permit a business man to keep receipts for money instead of coin. It did not permit the bank to keep less coin than the combined amounts intrusted to its care by individual depositors, and therefore did not cause any direct economy in the supply of currency needed in commerce. But, when a bank proceeds to lend a half or three-quarters of the currency in its possession, while holding out its ability and willingness to pay currency to all depositors who ask for it, the power of a given amount of currency is multiplied nearly fourfold. Other things being equal, a country which changes at once from the system of a simple deposit bank, like the Bank of Amsterdam, to a credit bank holding only 25 per cent. in

currency against its obligations to pay currency, would economize the use of currency by three-fourths.

The more complex forms of commercial banking are extensions and modifications of these simple principles of the economy of money. The banker is a dealer in money more precisely than some writers have been willing to grant. He is a dealer in money, because money is, in the ultimate analysis, the commodity which he promises to deliver on demand.\* If he receives the paper certificates of other banks and bankers on deposit in lieu of coined money, it is because those other bankers are pledged, like him, to redeem their receipts on demand in metallic money. If he delivers his own promises to pay coined money to borrowers instead of delivering the coin, it is because those receipts are exchangeable for money and money's worth in the hands of their holders. Because they possess such exchangeability, they are passed from hand to hand as a substitute for money, in the same manner as the deposit receipts of the Bank of Amsterdam, where no credit element was involved, were passed from one Dutch merchant to another.

The primary function of the commercial banker, therefore, is that of a broker and dealer in money. It is his mission to provide money for those who need it,—to keep it for hire, just as a livery stable keeper keeps horses and carriages for hire. The fact that money can be had at a bank diminishes the necessity that an individual should keep it, just as the fact that bread can be bought at the baker's and carriages hired at the stable obviates the necessity that every individual should keep a large store of bread and his own carriage to guard against any possible need for them. Hence arises the economy in the use of money promoted by all forms of banking credit. The borrower who needs gold or its equivalent to meet certain demands does not bury it or hoard it long in advance of his future needs, as was done among barbarous people, and is still

\* How clearly this is understood by the practical banker appears from the definition of M. Ruotte of the *Crédit lyonnais*: "The only matter with which the banker deals is money. It is money which he sells and which he buys, which he lends and which is intrusted to him; which he exchanges, which he receives or delivers at a given point or at a distance by way of his connections. In a word, it is money alone which is the basis of all the business which he does and all the operations which he conducts." *Opérations et travaux de banque*, p. 12.

the custom in India and China, because he knows that it will be much more economical to go to the shop where money is kept and buy it by the offer to repay it with interest at a future date, or by the delivery into the hands of the bankers of some security which can be converted into money.

The banker, under the operation of the processes which have been set forth, holds out the continuous offer to supply coined money against his obligations when it is needed. By making himself the custodian and his bank the reservoir of such money, he relieves individuals from keeping it on hand. Those who possess coined money are willing to surrender it to him in exchange for deposit receipts or for books of checks, which they can fill up with positive demands for coined money, to the limit of the amount which they have intrusted to the keeping of the banker. The merchant who sells goods and takes money in payment postpones the purchase of goods, which he would necessarily make if he exchanged his goods directly by barter for other goods. He therefore possesses stored purchasing power which he might hoard until such time as he had purchases to make. In intrusting this to the banker, he does not create new capital or secure any credit for himself. He simply transfers to the banker the stored purchasing power which he possesses. If payment for the goods has been made in coin and it is this coin which is transferred to the banker, there is no creation of new capital, and only in a narrow sense a creation of credit. If the banker in his turn transfers coin to the borrower, he transfers to him also actual stored purchasing power. The real nature of these transactions does not differ materially where the banker accepts checks, foreign bills of exchange, or drafts instead of metallic money. He accepts these titles in the belief that they are issued by persons having metallic money or the power to obtain it, and that they are convertible into such money without loss. If he accepts a check drawn by one of his depositors as a deposit by another, he simply saves them and himself the trouble involved in paying out metallic money to one and receiving it back from the other. Errors sometimes occur in the estimate made by a banker of the character of the promises or titles which he thus receives. But it is



evident from this analysis that in these transactions the element of credit is a smaller or at least a more precise factor than is often believed.

The point at which credit enters in an important degree into the transaction relates to the question of the ability of the borrower to repay his loan on the date named. The depositor, when he transferred his money to the banker, possessed purchasing power which he might have exchanged at once for other commodities than those which he produced. In entrusting this purchasing power to the banker, with implied permission to transfer it by way of loan to others, he permitted the banker to divert this purchasing power to a holder who avowedly had not capital of his own in such form in the amounts which he desired. The borrower takes the capital in the implied belief that he can so employ it as to have at his command, at that date in the future set forth in his contract with the banker, metallic money or stored purchasing power sufficient to discharge his debt. In this sense the declaration of Professor Yves Guyot is justified, that "the great rôle of credit is to save time, just as the means of transportation have for an object the shortening of distance."\*

The fact that bank loans are loans of money or convertible without delay into money gives its distinctive character to commercial banking. A bank must always have money, because that is the article of merchandise in which it deals; and it must have its business so adjusted that it can have at any time a sufficient quantity of money for meeting its outstanding contracts to deliver money. This is the secret of the fact, which has been discussed more fully elsewhere,† that a bank issuing circulating notes, convertible into metallic money on demand, cannot make any considerable amount of loans for long terms. It makes loans upon short-dated paper because this paper is constantly falling due and has to be paid in money. No other security can keep the bank solvent in respect to the ability to deliver the article which it purports to deliver,—coined money. Other securities may have value in exchange, and might constitute useful assets for a dealer in

\* *L'économie de l'effort*, p. 111.

† Vide "The Principles of a Banking Currency," *New York Bankers' Magazine*, May and June, 1899.

securities or commodities; but it is the business of a bank to meet the specific demand for coined money, and not to offer its creditors the barter of some other article. A commercial bank deals in money; and it is its business to keep this particular merchandise always within reach of its customers, just as it is the business of the merchant of cotton goods to keep cottons upon his counter, and not to offer them any less satisfactory substitute.

From the fundamental function of the banker as a keeper of money on hire arises, therefore, his auxiliary function in gathering up the money of the people in order to reduce the stock of idle money in their hands to the lowest limits and to thereby insure the greatest economy in the investment of the capital of the community in actual currency. Hence it comes that the banker solicits the deposits of even the smallest owners of money, that he may combine these small holdings into amounts large enough to be used profitably in loans for carrying on important business enterprises. The functions of the banker are thus set forth by Professor Courcelle-Seneuil: \*—

Considered in its broader aspects and from the point of view of social utility and public service, the banking business has for its object:—

1. To give steadiness and uniformity in some degree throughout the commercial world and its several parts to the price of money and the precious metals.
2. To serve as an intermediary between capital seeking investment and labor seeking capital,—to create, in fine, a sort of public market where the establishment of a current price tends to conform individual contracts to a uniform rate.
3. To transfer and exchange the various titles to property in capital measured in money in a manner to economize, by clearing the results of commercial sales against each other, the payments in specie and the actual transfer of money.

It is in gathering up the capital of others through the deposit system that the commercial banker renders one of his essential services to the community. It is the performance of this function, with the power to lend this capital, which distin-

\* *Traité des opérations de banque*, p. 69.

guishes an advanced economic society from a society which is backward in economizing the use of money. So striking are the benefits of this economy that some writers have denominated it the actual creation of capital.\* The benefits which the public confer upon the banks by their direct deposits and by the unconscious loan involved in the acceptance of the notes of the bank are fully compensated by the benefits which the banks confer upon the public in gathering together small credits and adding them to the useful resources of the community. The process of these operations is thus set forth by Professor Dunbar: † —

The first bankers probably had little thought of affording encouragement or applying a stimulus to the industry of the community as a whole. When they began, however, to lend their money systematically to merchants or the producers of goods, they began to give the command of capital in the enterprises where, for the time being, it was most called for and presumably most needed. When they increased their loans of this sort, by means of the funds left temporarily in their care by persons depositing with them, they began to give to industry the benefit of capital which would otherwise have remained idle, or to secure the more speedy application of capital slowly seeking employment. The use of their own notes as the medium for making their loans, in a manner strictly analogous, gave to their borrowers the command of capital which the fluctuating body of note-holders might forbear to demand. And their practice of discounting the bills received by dealers from their customers tended to a rapid organization of credit, and, by giving the dealer the immediate use of that which was due to him at some time in the future, shortened the period required for "turning his money" and undertaking some fresh enterprise. It is obvious that the bankers created no new capital by their lending and deposit-holding; but it is equally plain that they directed the streams of capital to the enterprises and industries requiring such support, and that they quickened the succession of commercial and industrial operations. A given amount of capital was thus made more effective, so that the result of the introduction of banking in any community was the equivalent of a considerable increase of capital, although not implying any real increase in the first instance.

\* Thus Professor MacLeod declares that "money and credit are essentially of the same nature: money being only the highest and most general form of credit; they are each a right or title to demand some product or service in future." *Theory of Credit*, i. 90.

† *Chapters on Banking*, p. 4.

In a much more enthusiastic strain speaks M. du Puynode, in spite of the fact that he rejects the theory that credit actually creates capital. He declares: \* —

Fertile as have been the mines of Mexico and Peru, from which long after the time of Columbus seemed to flow the fortune of the universe, there is, however, a discovery more precious for humanity and one worth more than the riches of the Americas,—the discovery of credit. . . . It doubles, multiplies a hundred-fold the activity and services of capital, it renders those services more constant and more generous, more certain and more speedy; but of capital itself, it does not create a particle. Institutions of credit are institutions of circulation: they are not institutions of production.

It is in distributing between depositors, borrowers, and his own vaults the money intrusted to him by depositors in such a manner that he shall always be able to repay it according to his promise that the most delicate and important function of the banker arises. It is in the execution of this function that the modern banker has become the arbiter of the direction of investment, the organization of industry, and even of the fate of nations. Simple as the process is by which the banker transfers to others the stored purchasing power which he has gathered up in small deposits from his customers who have acquired gold or the right to command gold, it is his selection among these borrowers which determines the entire course of the industrial progress of a nation. The powerful banker has acquired not only the command over the purchasing power of others, but he has imparted such confidence everywhere in his ability to fulfill his promises to pay metallic money on demand whenever the demand is made upon him to pay one of his promises that his mere indorsement of a promise or his mere acceptance of some other person's promise becomes as potent in his hands as the tender of gold in the hands of others.

Hence it comes that the great banker, in the financing of important enterprises, can by a word determine whether a given project shall succeed or fail. As the master of uninvested capital, he is the final judge, from whose decision there is no appeal, of the direction in which capital shall be applied to industry. In every growing community much of the real

\* *De la monnaie, du crédit, et de l'impôt*, t. 106, 107.

burden of deciding upon the course of its future development, much of the real credit for this development, lies with the banker. It is for him to determine the relative marginal utility of one enterprise as compared with another and to grant his support only to the enterprise which promises the highest utility and therefore the most certain profits.\* Thus the prudent and intelligent banker determines whether a community shall have a cotton-mill or a rolling-mill, whether it shall have a gas plant or a tramway. It is his function to apply the test of present utility to the demands of speculators and promoters. Such of their projects as commend themselves to his sober judgment he assists with the money intrusted to his care. To such of them as do not thus commend themselves he refuses his assistance. Thus there rests upon the banker in a sense the vital function of trustee for the community in its dealings with itself. This trusteeship is especially sacred if he deals with the money of others, as is usually the case, and not purely with money of his own.

The fertility in the creation of new enterprises in modern economic society is one of the natural results of the transferability of capital which is promoted by the banking system. It is the banker largely who determines the direction of industry by his willingness to make loans to industries which are profitable because they are meeting a demand, and by his withdrawal of loans from industries which are ceasing to be profitable because of overproduction and diminished demand. How this process operates is thus set forth by Mr. Bagehot: † —

It is the money-lender in a primitive community whose capital is first transferred readily from occupation to occupation. Suppose a new crop, say cotton, becomes suddenly lucrative: immediately the little proprietors throng to the money-lender to obtain funds to buy cotton. A new trade is begun by his help, which could not have been begun without him. If cotton ceases to be a good crop, he ceases to lend to grow it.

\* M. Courcelle-Seneuil declares that "the capital of a nation is nothing else than the sum of all the utility which that nation possesses." *Traité des opérations de banque*, p. 15. It is obvious that under this definition that which has ceased to be useful has ceased to be capital. It is the duty of the banker, therefore, to take note of utilities, in order to avoid dealing with material things and projects which in the sequel may prove not to be capital within this definition.

† *The Transferability of Capital*, Works, v. 287.

From this function of the banker in the use of credit naturally opens the vista of the great power which he exercises under modern conditions in the consolidation of industries, the weeding out of worn-out institutions, the combinations of railways and steamship lines, and all the other steps which have been taken within a decade to promote the economy of effort and the efficiency of industry. The banker's has in some of these cases been the originating and productive mind which has discovered the opportunity for these combinations and brought together the discordant elements necessary to make them succeed. The best type of banker, however, does not usually act directly as a promoter. He leaves it to others to present such projects for his consideration, and sits in impartial judgment upon their value in the economy of society.

If this ideal conception has not always been realized in fact, and the banker has occasionally been attracted by the prospect of large commissions upon doubtful operations, he has forgotten his true functions and has hazarded unwisely the capital which has been intrusted to his keeping. It must be remembered that, whatever criticism may justly lie against any given combination or financial operation, it cannot ultimately succeed if it does not involve economy of capital or effort and benefit to the community. The banker may in certain cases succeed in unloading doubtful securities on the public before their character has become known; but, in doing so, he exposes himself to more than the usual banking risk, and departs from his true and only safe function in guiding industry in the directions which will insure his profit from the service which is rendered to the community.

It is in advancing money upon merchandise (or to the dealers in merchandise on their personal credit, which comes to the same thing from an economic point of view) that the banker brings the element of credit in a large degree into his calculations. He then with the solid money of his depositors discounts the future profits of the borrower,—the ability of the borrower to pay metallic money, or the unquestioned titles to it, at the date fixed in the contract.

If the banker alone controlled the direction of industry, by withdrawing loans where he suspected overproduction and

granting them where he saw opportunities for safe profits, his problem would be much simpler than it is in the world of realities. Other holders of money, many of them disposing of their own capital, are always competing for new and profitable commercial undertakings. The wisdom of the banker will to a certain extent determine the movement of capital on the margin between different enterprises, offering varying degrees of security and profit. It will be largely for him to decide when the margin of profitable development in any one direction has been reached and when encouragement to further expansion in that direction should cease. But it is sometimes not within the banker's power, even within the limits of a single community, to keep the course of industry within the conservative limits which he might wish. When overproduction takes place in any industry which he has aided, followed by falling prices and stagnant markets, the primary condition is threatened upon which his own solvency depends. The capital which he has advanced to this industry may then be suddenly locked up in unmerchandiseable products and cease to be recoverable. It is then that the stored purchasing power intrusted by his depositors to the banker, and which he has lent to others, ceases to be readily convertible back into money.

A wrong direction may be given to capital, and doubtless often is given, by the personal interest of the banker in business connections which are outside the legitimate field of banking. Desire to promote some enterprise from which he expects to derive large profits will lead to loans and advances which are known to be doubtful, but which are counted upon to run without disaster the gauntlet of unusual risks. One of the greatest temptations which comes to the banker is to become a partner in business enterprises and to support them with the money of his depositors, in defiance of the rule that capital should be invested in the enterprise of greatest benefit to the community consistent with security. In undeveloped countries, where banking has not settled into well-defined traditional channels, this danger is especially great. The lesson that the business of a commercial bank should be strictly limited to loans for short terms to persons and companies



capable of repaying them at maturity has been well learned in England and France, and is appreciated by the great bankers of other civilized countries. In Germany, Belgium, and Austro-Hungary, however, the rapid development of industrial enterprises from 1897 to 1901 tempted many of the great banks into loans of a character which may have aided in promoting the development of the country, but involved serious elements of risk from the standpoint of commercial banking. How far this process was carried in Germany was thus set forth in an English journal: \*—

The banks are interested as investors in industrial companies of all kinds, not merely railways, tramways, and electrical concerns, but even in such things as cement works. No doubt all these industrial concerns are sound. No doubt they yield a good return on the money employed. But, all the same, the market for them is confined to Germany; and, if trouble were to arise, it would be impossible for the banks to realize their investments. Therefore, these investments must be looked upon as a lock-up of capital for a considerable time to come.

Such dangerous uses of the resources of depositors depart from the true rule of banking, and, when caused by personal interest on the part of the banker, lead to a wanton misdirection of the fund of circulating capital. Enterprises of doubtful utility are thus sustained long beyond their period of usefulness, and eventually may drag down the bank which has thus abused its functions. The equilibrium between demand and supply of certain commodities being broken by the errors of producer and banker, the equilibrium between the demand and supply of metallic money may also be threatened. No one understands better than the far-sighted banker who has once confronted such conditions that cost of production does not control value when supply exceeds demand.† Notes which he has treated

\* *London Statist* (February 24, 1900), xlv. 283. The dangers involved in this method of banking were brought forcibly home to German bankers during the crisis of 1901, and were the subject of earnest discussion at a convention of bankers held at Frankfort on September 18, 1902. Vide *Moniteur des Intérêts Matériels*, September 21, 1902, p. 2782.

† "However great the cost expended on an article, if the public will not have it, all the costs in Christendom will not give it a value; and, if the good continues to be dead stock, all the machinery and buildings by which it has been made lose their value, except in as far as they can be turned to other uses, and get another value from another product." Smart, *Introduction to the Theory of Value*, p. 68.



as valid promises to pay him money on given dates and securities which he has believed he could convert into money, he then finds without value for this purpose or with a much lower value than that for which they were accepted.

It is because of their function in protecting the tool of exchange that bankers are justified in acting with extreme caution in making loans and in refusing support to enterprises which involve great risk. The success of some of these enterprises may be important to the community, but the risks involved are of a character which should be assumed only by persons of a daring turn of mind who are willing to risk their own capital. The banker is constrained to conservatism both by the fact that he is the trustee of the money of his depositors and by the fact — still more important in some respects — that he is the trustee of the mechanism of credit for the entire community, whether its members are individually depositors with him or not.

These considerations explain, and to some extent justify, the severity of the rules sometimes followed by bankers in new and undeveloped communities. Unconsciously, in charging high rates for the use of money, they are collecting a necessary premium for the risks they run. While they may permit their charges in this respect to be dictated by selfishness, they are abundantly justified, when loaning upon securities in any way questionable, in accepting such securities only with an ample margin of allowance for shrinkage in their value. If such shrinkage is material, the banker takes the whole of the value which remains, often leaving the borrower by whom securities were pledged with little or nothing. Harsh as this condition has sometimes seemed in communities where values have fallen greatly, it grows naturally out of the function of the banker in its relation to other interests. The borrower takes large risks, but he also takes the opportunity of large profits. High rates for money and capital, moreover, in a community where the supply is not sufficient for all, tend to bring into operation the law of natural selection. Those enterprises whose marginal utility to the community is greatest will be able to pay the high rates charged: those whose marginal utility is relatively low will be forced by this process of natu-

ral selection out of the money market. Rates which were made indiscriminately low, where the supply of capital was deficient, would destroy this efficient index of the proper use of capital and permit its rental to the first comer, with results perhaps very detrimental to economic development along the lines where it was most needed. The effect of an artificially low rate for the rental of money under such conditions would be similar to the effect of an abnormally low price for bread when wheat was scarce,—dangerous prodigality when there should be rigid economy.

The efforts of monetary reformers, therefore, should not be directed to arbitrarily depressing the rate of interest where currency and capital are scarce, but to naturally bringing down the rate by increasing the offer of capital, the means for drawing it out of private hands where it is idle, and the facilities for transferring it.\* While the rate for the rental of money may be unduly enhanced by facts which hamper the free movement of capital, including restrictive currency laws, this rate is in itself, other things being equal, the index of the supply of capital in relation to demand and the means by which capital is directed into the channels of its greatest efficiency. Only the man who can see a large rate of profit in his projects will borrow money at a high rate; and he will find the highest rate of profit in those enterprises which have the highest social value, or at least stand in the highest estimation in the community, as shown by their returns.†

It is of paramount importance to every individual in a modern civilized community that banking credit should have the same solidity as coined money. Suspension of cash payments by bankers affects not only their depositors, but every one with whom these depositors deal. This is especially the case when the banks issue currency designed to circulate as money. Every commercial banker is under contracts to deliver metallic money on demand. It matters little whether

\*It is obvious that one means to these ends is the issue of credit currency, because every holder of a credit note has intrusted his capital to the amount of the note to the issuing bank for the use of the community.

†They may not in all cases have the highest hygienic or moral value; but that has little bearing on the question discussed here, since a low rate for money would not in any way discourage borrowing it for immoral or wasteful purposes.

these contracts are in the form of printed notes or acknowledgments in a deposit book. The banker is a broker in money, with many contracts outstanding for the future delivery of money. As a "corner" on the stock exchange means ruin for brokers who are "short" of the "cornered" stock, so a corner in currency means ruin primarily for the banker if he is "short" of currency and, secondarily, for all the patrons to whom he is under contract to make delivery, because they, too, are under contracts to deliver money to domestic servants, wage-earners, shop-keepers, and manufacturers. The banker is the guardian of a mechanism whose derangement means serious embarrassment, and perhaps ruin, to every member of the community. It is enjoined upon him, therefore, to so employ the surplus capital of which he is the custodian as to extend the greatest possible aid to those enterprises which promise the greatest sum of economic benefits, while taking extreme precautions, as trustee for all members of the community, that he shall never be unable to fulfil exactly and without grace all the contracts which he has made to deliver money.

CHARLES A. CONANT.

## NOTES AND MEMORANDA.

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### THE NEW ECONOMICS TRIPOS AT CAMBRIDGE UNIVERSITY.

England has recently had from high quarters her warning to "wake up," if she would maintain her industrial and commercial position; but her universities had already begun to remove the reproach — largely justified in the past — that they have neglected that thorough training in economics which this generation is coming to recognize as essential both to the intelligent government of business and to the increasingly complex business of government. One after another the British universities are instituting faculties or constructing curricula which aim to give to economics a properly equal status among higher studies. They are seeking to provide not merely for the needs of specialists, but also for that greater class of students who justly ask that their undergraduate years shall offer opportunity for some serious preparation to meet the urgent and intricate problems of modern business and public life. The new teaching universities of London and Birmingham have led the way by the creation of special faculties, the enterprising London School of Economics forming in the one case the nucleus for a Faculty of Economics and Political Science, while at Birmingham Professor Ashley is inaugurating the work of a Faculty of Commerce. Manchester, Liverpool, Leeds, and the Scottish universities are following on similar lines; and the two older universities, with characteristic deliberation, but with equally characteristic thoroughness, are taking preliminary steps in the same direction. At Cambridge the matter has been the subject of much discussion for the last decade, but it was not until the spring of 1900 that Professor Sidgwick became convinced that the time had come for advance. His death delayed action for more than a year;

but the movement has now been started by Professor Marshall, who in April, 1902, addressed to the University Senate a persuasive *Plea for the Creation of a Curriculum in Economics and Associated Branches of Political Science*. A syndicate of thirteen members, including Drs. Cunningham, Maitland, Westlake, Keynes, and Professors Marshall and Sorley, was thereupon appointed to inquire into the best means of enlarging the opportunities for these studies in Cambridge. The report of this committee, from which we note in passing that the signatures of Drs. Cunningham and Maitland are absent, has recently been published in the official *Cambridge University Reporter* (for March 10, 1903). The report recommends the establishment of an honors examination in economics and politics, with a special board to watch over this department of work, and at the same time proposes for the approval of the Senate definite regulations and examination schedules for the new Tripos.

Hitherto it has been a matter of considerable difficulty for the average Cambridge student to make any thorough study of economics during his three years' undergraduate course. It has been only by a devious route that this object could even be approximately attained. He has been able, it appears, to take the examination known as Part I. of the Historical Tripos at the end of his second year, including a certain amount of work in economics with a much larger proportion of mediæval and general history than seems desirable for the student of modern conditions. The Historical Board has indeed made increasingly liberal provision for the interests of such students, but unless the character of the Historical Tripos be radically changed, economics under such tutelage must play only a subordinate part. The student of economics may then, in his third year, continue with that division of Part II. of the Moral Science Tripos in which candidates are allowed to specialize in political philosophy and advanced economics. But it is naturally felt to be an anomalous arrangement, and one not free from practical difficulties, by which the responsibility for the young economist's training is shared by two boards, one chiefly concerned with psychology, logic, and ethics, and the other unable to give any adequate attention to economics in

its broader aspects, or even to recent history, especially on its economic side. This makeshift, a compromise with the curricula of a past generation, is now to be replaced by an independent Tripos which affords opportunity for as much thorough work in economics and in related modern subjects as can well be compassed in an undergraduate course.

The new program, following the English university practice, is set forth in the schedule of examination subjects. For the first honors examination, to be taken normally at the end of the second year of residence, seven papers are to be set, all obligatory. Three of these cover the general principles of economics, and two deal with the recent economic and general history of the United Kingdom, of the other English-speaking peoples, and of France and Germany. Some knowledge of physical geography in relation to recent economic development is also here required. The existing British constitution, including a comparative study of the government of colonies and dependencies, is the subject of another paper; while the seventh consists of an essay on some assigned subject. The second part of the Economics Tripos, taken a year later, is to have fourteen papers. Public finance and the economic functions of government are to receive especial attention in the three papers on General Economics; and questions dealing with the structure and problems of modern industry (including transportation), wages and conditions of employment, money, credit and prices, and international trade are to be scattered between the four papers on Advanced Economics. Two of these are to be of a realistic or descriptive and two of a more analytic character, including the more difficult problems of value, the history of economic doctrines, and some of the applications of mathematics to economics. Six papers are devoted to cognate subjects in politics and law, one of these on the political theories of the nineteenth century, two on international law with reference to existing political and economic conditions, two on the principles of law in their application to economic questions, and the sixth on some special subject, chosen from time to time, in the field of recent economic and general history or in foreign or colonial political administrative organization. Part II. includes also an essay subject; and this, together with

the three papers on General Economics, and not less than two or more than five of the remaining papers, is obligatory on all candidates. Even in these obligatory examination papers a considerable number of questions are to be optional, thus allowing scope for specialization. All candidates are to be set certain questions which assume a working knowledge of French and German. If the recommendations of the syndicate are adopted, the first examination for Part I. of the new Tripos will be held in 1905, and for Part II. in 1906, so that the preparatory work must commence without delay, although, as the committee points out, the present teaching staff is insufficient for the enlarged course.

It will be apparent from this outline that the severance of economics from its older companions, history and the moral sciences, is practically complete, and that effect has been given to Professor Marshall's preference for law as a new associate. Some shred, indeed, of the present connection with the moral sciences will be retained in the new curriculum. Logic and psychology are to be altogether excluded, but the papers on General Economics in Part II. of the Tripos are to include some questions on the ethical aspects of economic problems. All history, however, previous to the nineteenth century, is shaken off with scant courtesy. The new Tripos will aim above all at 'actuality'; it confines itself solely to the study of recent and existing conditions. "No time," so the report runs, following Professor Marshall's lead, "can be spared for a detailed study of earlier periods." But there is not only no detailed study, there is not even place provided for a mere outline of earlier economic history. Many will regard this as a serious omission. While the practical effort to give academic attention and standing to the investigation of contemporary economic problems deserves and will receive approval, it is regrettable that, in the reaction from perhaps an excess of political and constitutional history, the historical side seems now likely to be totally neglected in the undergraduate's training. While not going so far as to claim that economic history is the sole or necessarily always the best avenue of approach to economic studies, or with the extremists of the historical school to assert that the study of the laws of economic develop-

ment should form the sole content of the science, one may nevertheless question the wisdom of exclusive undergraduate absorption in present-day interests and problems without some historical corrective. Professor Marshall insists that "only those facts should be studied which are strictly necessary to give reality and a sense of proportion to the student's thought"; but it may be doubted whether, without the perspective of history, even a minute and detailed study under the guidance of such a master as Professor Marshall can give the student a picture of modern conditions which shall possess adequate proportion and reality.

As a make-weight however, though history and philosophy are to be thus curtailed, economics itself in its general enlargement makes one noteworthy extension. As Professor Marshall indicates, "one chief weakness of the present study of economics in Cambridge is that it is perforce insular." This insularity is to be corrected in the emphasis placed throughout the new schedule on the study of the experiences of the colonies, of the United States and of Western Europe. This is seen not only in the examination subjects for Part I., but also in Part II. of the Tripos, where the syndicate heads the definitions of the scope of the papers with the general rule that "throughout Part II. international comparisons shall be introduced where practicable."

On the whole, this new departure in one of our oldest English-speaking universities is a distinct advance which will be warmly welcomed by economists generally, and will doubtless be approved by the English public, to whose awakened sense of efficiency the universities cannot afford to be indifferent.

EDWIN F. GAY.

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WHILE the English universities have been enlarging their plans for teaching economics, the British Economic Association has been granted a royal charter, and will henceforth be known as the Royal Economic Society of Great Britain. These two changes are significant of the great renewal of interest in economic subjects in the early home of the science.



### A SUGGESTION FOR A THEORY OF INDUSTRIAL DEPRESSIONS.

One characteristic of a modern industrial community is the large proportion which producers' goods hold to the total wealth. This means that a large part of the wealth is in forms which have no utility in themselves, but which derive their utility from the goods which they help to produce. A satisfactory explanation of industrial depression must, in the opinion of the present writer, be sought in the laws of value which govern investment in this class of goods rather than in the examination of the conditions of the money market, or conditions of organized credit.

Let us begin by noticing a few elementary facts. Every farmer knows that a horse which will not earn more than his feed, or a piece of land which will not produce more than it costs to cultivate it, is of no value. Likewise every business man knows that an establishment which cannot be made to more than pay running expenses is worth nothing except as old iron. This is equivalent to saying that the value of such an establishment — or, indeed, of any productive agent — is determined not by the total value of its product, but by the excess of that total value over and above the running expenses. When the running expenses are high and the output large, so that the earnings depend upon small profits and large sales, a very slight rise in the value of the product may double or more than double this excess, and, in consequence, double or more than double the value of the establishment, — provided, of course, the rise in value is believed to be permanent. Let us suppose that a certain shoe factory can be made to turn out 1,000,000 pairs of shoes in a year at a uniform cost of \$2.00 a pair. If these shoes cannot be sold for more than \$2.00 a pair, the plant is worthless; but, if they can be sold for \$2.25 a pair, the earnings of the plant will be \$25,000, which, capitalized at 5 per cent., will make it worth \$125,000. If, however, the

price of the shoes should rise to \$2.50, the earnings of the plant would double; and, if this rise in value were believed to be permanent, the value of the plant would double. Thus an increase of only one-ninth in the value of the product would double the value of the plant. In the same way a subsequent fall of one-tenth in the value of the product would reduce the value of the plant by one-half, while a fall of one-fifth in the value of the product would destroy the value of the plant altogether. This may be stated as a general law to the effect that a slight fluctuation in the value of a product tends to produce a violent fluctuation in the value of the establishment producing it. Stated in still more general terms, the value of producers' goods tends to fluctuate more violently than the value of consumers' goods.

This law is capable of still further extension when we consider that producers' goods are themselves produced by other productive agents. The different parts of the shoe factory of the above illustration were produced in other factories, and the fluctuations in the value of the shoe factory would tend to produce still more violent fluctuations in the value of the establishments producing its different parts, for the same reasons as were given above. The law might therefore be extended so as to read: the further removed the producers' goods are from some consumable product, and the more remotely their value is derived from that of some consumable product, the more violent the fluctuations in value tend to be.

This would be the tendency until that stage was reached where the producer's agents were no longer especially connected with one particular line of production, and were not therefore affected in value merely by changes in price of the one kind of consumable product.

It must be admitted that the fluctuations in the value of producers' goods are never actually so violent as the foregoing illustrations have supposed, mainly for the reason that not every rise or fall in the value of products is believed to be permanent. But, where the high or low price of a product continues for some time, it invariably leads to a belief that it is likely to continue; and this raises or depresses the price of the

productive agent out of proportion to the rise or fall in the price of the product.

In this connection it is well to observe that, while the immediate demand for consumers' goods comes from consumers themselves, the immediate demand for producers' goods comes from investors. Since their willingness to invest depends, not upon the value of the gross product of the productive agent, but upon the excess of that gross product over and above the cost of using the agent, which excess has been shown to fluctuate more violently than the total value, the instability of the investors' market is, therefore, not altogether due to psychological changes on their part, but in a large degree to the objective causes which affect the value of the things in which they invest.

A slight rise in the price of consumers' goods will so increase the value of the producers' goods which enter into their production as to lead to larger investment in producers' goods. The resulting larger market for producers' goods again stimulates the production of such goods, and withdraws productive energy from the creation of consumers' goods. This for the time tends to raise the price of consumers' goods still higher, and this again to stimulate still further the creation of producers' goods. There is no check to this tendency until the new stocks of producers' goods begin to pour upon the market an increased flow of consumers' goods. This tends to produce a fall in their value, which in turn produces a still greater fall in the value of producers' goods, and so the process goes. There seems, therefore, to be a fundamental reason for the periodicity of industrial depression, which can only be removed by such a complete knowledge and understanding of the situation as would enable the business world to foresee the tendencies and take measures to overcome them.

These observations regarding the law of value as applied to different classes of goods may throw some light on the relative stability in the price of a consumable article, such as sugar, in comparison with the price of such an article as steel, which belongs to the class of producers' goods several steps removed from consumers' goods. The market for sugar is mainly a consumer's market, while the market for steel is mainly an in-

vestor's market. A consumer's market depends upon the willingness of the public to consume, while an investor's market depends upon their willingness to invest. As was shown above, there are reasons, other than psychological, why an investor's market must be more unstable than a consumer's market.

T. N. CARVER.

## THE UNITED STATES STEEL BOND CONVERSION.

The litigation growing out of the plan of the United States Steel Corporation to retire \$200,000,000 of its preferred stock by issuing bonds therefor has involved many interesting questions under the New Jersey law.

The corporation was formed in 1901 with a capital stock of \$1,100,000,000. Of this a little over \$500,000,000 preferred stock, "entitled to receive, and the corporation bound to pay," 7 per cent. cumulative dividends, payable quarterly, beginning April 1, 1901, was issued. The act of 1896, under which the corporation was formed, provided that such a corporation might decrease its stock "by purchase at not above par certain shares for retirement"; also that it might purchase such personal property as its business might require. The articles of association also authorized the corporation to issue its bonds in payment for property purchased or acquired, or "in or about its business," and secure them by mortgage upon its property.

March 28, 1902, an act was passed providing: "When the consent of two-thirds in interest of each class of stockholders present in person or by proxy," at a meeting called for the purpose, a corporation "that shall have continuously declared and paid dividends at such rate on such preferred stock for the period of at least one year next preceding the meeting," and whose assets, after deducting the indebtedness, shall be at least equal to the preferred stock, may redeem the same out of bonds or the proceeds thereof, bearing 5 per cent. interest.

April 1, 1902, the directors voted to accept the act of 1902, and to retire \$200,000,000 of the preferred stock "to the extent the holders thereof consent thereto," out of bonds to be issued therefor, and directed that a contract for that purpose be made with J. P. Morgan & Co., to become operative after the approval of the stockholders in special meeting. Preferred stockholders were given the privilege of subscribing for the bonds, and paying for them in preferred stock. If all

the bonds were not subscribed for, the bankers were to have the right to take the balance; and a syndicate was formed for that purpose, the commission for which was to be \$8,000,000. A stockholders' meeting was called for May 19, 1902, the notice stating that "a syndicate, *including some directors*, which will receive four-fifths" of the commission, had been formed to further the plan. At the meeting 77 per cent. of all the shares were present. Over 76 per cent. of all and over 99 per cent. of the stock present voted for the plan.

Dissenting shareholders immediately brought suit to enjoin carrying out the plan, on the ground that the act of 1902 was a material amendment to the charter, which impaired the contract of such shareholders with the corporation, and divested them of vested rights, by placing a mortgage ahead of their preferred shares. These contentions were overruled. (*Verner v. U. S. Steel Corp.*, 116 Fed. R. 1012, 17 Am. & Eng. Corp. Cas. N. S. 224; *Berger v. U. S. Steel Corp.*, 53 Atl. 68, 17 Am. & Eng. Corp. Cas. N. S. 54, overruling the decision of the Court of Chancery, *Berger v. U. S. Steel Corp.*, 53 Atl. 14, 17 Am. & Eng. Corp. Cas. N. S. 36.)

In the foregoing cases the pleadings admitted the act of 1902 had been complied with. Afterwards Mr. Hodge brought suit to enjoin on the ground that this act had not been complied with in that: the dividends had not been continuously paid as required; the contract with the bankers was *void* because 15 out of 24 of the directors were interested in it; and it was not authorized by the votes of the requisite number of disinterested shares in stockholders' meeting.

As to the continuous payment of dividends, the facts showed that quarterly dividends of  $1\frac{3}{4}$  per cent. had been paid four times,—the first for the quarter beginning April, 1901, declared July 2, 1901, and paid August 7, 1901; the last for the quarter ending March 31, 1902, declared April 9, 1902, paid May 15, 1902. The meeting was called for May 19,—this was 44 days less than one year after the first quarterly dividend was *declared*, and 80 days less than a year after it was *paid*. On these facts the lower court held that dividends at the rate of 7 per cent. had not been declared and paid *continuously* for a year, and that, if the dividends were

payable yearly, at least *two* such dividends must be paid; if payable half-yearly, at least *three* would be required; and, if *quarterly*, at least *five*, etc. This was overruled by the Court of Errors and Appeals, holding that "dividends at the rate of 7 per cent. must be paid for a continuous period of one year, so that, where dividends are paid quarterly, a quarterly dividend cannot be passed without losing the benefit of the act." (*Hodge v. U. S. Steel Corp.* 54 Atl. 1, February 18, 1903, overruling *Hodge v. U. S. Steel Corp.*, 53 Atl. 601, 17 Am. & Eng. Corp. Cas. n. s. 485.)

The other points noted above and of more general interest were not passed on by the Court of Chancery, but the Court of Errors and Appeals held: 1. That directors cannot lawfully enter into any contract, in the benefit of which even one of their number participates, *without the knowledge and consent of the stockholders*. This is the general rule. (3 *Clark & M. Corp.*, §§ 758-760; *Taylor*, 5th ed., §§ 627-629; 3 *Thompson*, §§ 4059-4066; *Stewart v. Lehigh Valley R.R.*, 9 Vr. 505; *Traction Co. v. Board of Works*, 27 Vr. 431.)

2. That such a contract, however, is not *void*, but only *voidable* at the option of shareholders, when they have notice of the interests of the directors, and, *a fortiori* when the contract is between the directors and stockholders, or when the shareholders expressly authorize the directors to enter into the contract, with notice of their interest, it is unassailable, without actual fraud. This accords with the general rule also. (3 *Clark & M. Corp.*, § 761; *Taylor*, 5th ed., § 630; 3 *Thompson*, § 4061; *Twinlick Oil Co. v. Marbury*, 91 U. S. 587, 2 Keener's Cas. Corp. 1510, 2 Wilgus Cas. Corp. 1750; *Minson v. Syracuse, etc., R.R. Co.*, 103 N. Y. 58, 2 Keener, 1519, 2 Wilgus, 1753; *Singer v. Salt Lake, etc., Co.*, 17 Utah, 143, 70 Am. St. R. 773, 53 Pac. 1024; *New Memphis Gas L. Co. Cases*, 105 Tenn. 268, 80 Am. St. R. 880, 60 S. W. 206; *Graham v. Carr*, 130 N. C. 271, 41 S. E. 379.) There are some holdings to the contrary (3 *Thompson*, § 4060).

3. Shareholders are charged with notice of those things which they could ascertain by reasonable inquiry, when their attention has been called to any fact that would ordinarily induce investigation. In this case the notice calling the share-

holders' meeting stated that *some of the directors* were interested in the contract with the syndicate. *Held*, that this was sufficient to put the shareholders upon inquiry as to how many directors were interested and to what extent. This is the general rule. (*Gale v. Morris*, 3 Stew. 285; *Haslett v. Stephany*, 10 Dick. 68; *Phosphate Lime Co. v. Green*, 7 C. P. 43; *Doran v. Dazey*, 5 N. Dak. 167, 57 Am. St. R. 550; *Wishard v. Hansen*, 99 Ia. 307, 61 Am. St. R. 238.)

4. In this case the plan to retire the stock did not receive a two-thirds vote, without counting the shares of those interested in the syndicate. *Held*, that in the stockholders' meeting the directors were entitled to vote upon the resolution not in their fiduciary capacity, but solely in the right of the shares of stock held by them. They had a right to be influenced by what they conceived to be for their own interest, and they cannot lawfully be denied that right, nor can it be limited or circumscribed by the fact that they occupied the position of directors in the company. The court did not rely particularly upon the express provision of the by-laws that contracts in which the directors were specially interested could be ratified by a majority of shareholders. The rule applied is fully sustained by the authorities. (*Leavenworth v. Chicago Ry. Co.*, 134 U. S. 688; *Nye v. Storer*, 168 Mass. 53; *Bjorngaard v. Goodhue Co. Bank*, 49 Minn. 483, 2 Wilgus Cas. Corp. 1596; *Shaw v. Davis*, 78 Md. 308, 28 Atl. 619; *Grant v. United Kingdom Ry. Co.*, 40 Ch. D. 135; *Beatty v. N. W. Trans. Co.*, L. R. 12 App. Cas. 589, 12 Can. Sup. Ct. 598, 11 Ont. App. 205, 6 Ont. 300; *Windmuller v. Stand. Dist., etc., Co.*, 114 Fed. R. 491. Compare *Gamble v. Water Co.*, 123 N. Y. 91; *Gage v. Fisher*, 5 N. Dak. 297, 31 L. R. A. 557.)

H. L. WILGUS.

UNIVERSITY OF MICHIGAN, March 28, 1903.



STUDENTS of the railway problem will be interested in a recent compilation of testimony, entitled *In the Matter of the Transportation of Dressed Meats and Packing-house Products. Orders and Testimony*, Washington, 1902. This document is similar in character to the compilation made in 1901 respecting the *Transportation, Handling, and Storage of Products*. This material, not published elsewhere in the regular issues of the Interstate Commerce Commission, is in a limited edition, but will be found to contain most valuable evidence respecting the topics concerned. The information respecting packing-house products is peculiarly valuable in view of the pending cases on the beef trust.

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To those interested in railway and corporate finance a recent document (57th Congress, 2d Session, Senate Document No. 178) cannot fail to be of importance. Unlike most of its kind, it is so brief that it is reproduced herewith for the benefit of students who might otherwise overlook it in the vast accumulations of ponderous volumes issuing from the Government Printing Office. It is in the form of a letter from the chairman of the Interstate Commerce Commission to the Senate Committee on Interstate Commerce.

The Interstate Commerce Commission has the honor to submit the following report in response to a resolution of the Senate of February 28, 1901, which reads as follows:—

*Resolved*, That the Interstate Commerce Commission be, and is hereby, directed to furnish the Senate with a statement showing in detail the character and par value of all common stock, preferred stock, mortgage bonds, income bonds, car-trust certificates, and other securities issued or authorized to be issued by each railroad company subject to the provisions of the act to regulate commerce, together with the par value of each class of such securities outstanding on June thirtieth, nineteen hundred, the rate of interest or dividends paid thereon during the year ended June thirtieth, nineteen hundred, and the market value of such securities on March thirty-first, June thirtieth, September thirtieth, and December thirty-first, nineteen hundred.

The valuation of railway property here reported has been computed according to the rule laid down in the above resolution. It may not

be inappropriate, as bearing upon the extent to which reliance can be placed upon the figures submitted, to state the difficulties encountered in this computation, and to suggest the limitations which necessarily inhere in the method of arriving at the value of railway property by computing the same upon the basis of the market quotations of railway securities.

The chief difficulty was found in the fact that by far the larger proportion of railway securities are not subject to extensive purchase and sale, and on this account fail to disclose a market price. This report deals with over 2,000 corporations; while the number whose securities were quoted on the stock market in such a manner as to enable a satisfactory computation of the value of the property which they represent, in conformity with the rule embodied in the resolution, did not exceed 225.

It should be held in mind that railways commonly issue more than one class of securities, and that the listing of a road upon the stock exchanges does not necessarily result in a market price for all classes of its obligations. Such being the case, recourse was had to the corporations themselves; and each of them was requested to furnish the market quotation of its securities, or, in case no purchase or sale had been made on or near the dates mentioned in the resolution, to estimate as nearly as possible the price which such securities would have brought, had they been sold. Without the courteous assistance of the officials of the railways in response to the circular letter containing this request, it would have been impossible to complete the report.

Another difficulty lay in the necessity of distinguishing between a bid for securities which included and one which excluded the accrued interest or dividends at the time the bid was made. Upon this point the following method was applied: In the case of bonds or other interest-bearing liabilities quoted upon the market a deduction was made from the market price equal to the interest which had accrued up to the time of purchase. The same general rule was applied in computing the value of capital stock, although for certain classes of stocks the date of closing books was substituted for the date of purchase. In the case of securities not listed, and whose value must on this account be estimated, no allowance was made for accrued interest or dividends, the assumption being that the value set upon the securities is that of an investor who designs to hold them for the income they produce.

A third difficulty rose on account of the intercorporate holding of railway securities. It is manifest that in case two classes of securities are issued upon the same property, the one being held as collateral for the other, it would be a duplication to assign full value to each. To the

extent also that securities which have been issued are not outstanding,—that is to say, where they exist in form, but are not a live liability,—it would be an error to assign a value to them in computing the value of the property. The rule adopted was to exclude all such securities. It would be too much to assert that this rule has been followed with absolute accuracy, but it is believed that no considerable error can be traced to this source.

With regard to the limitations upon the theory that the value of such securities as are bought upon the market is a just measure for the valuation of the property, two remarks are submitted:—

First. Any given purchase of stocks or bonds represents the purchase of but a small fraction of the property to be appraised, and on that account cannot be accepted as a safe measure of the value of the entire property. It is likely that the number of shares or obligations sold on any given day will bear a higher price than would be paid if the entire property were placed on sale.

Second. What is known as speculative buying, which includes competitive bids for the control of properties, is exposed to other influences than those which determine the true value of the property under consideration. This is too familiar a fact to need illustration; and therefore, as well as because the purchase of a few securities is an entirely different thing from the purchase of the property, it will be necessary to modify the figures contained in this report before making extensive use of them in any argument which rests upon the commercial valuation of railway property. Speculative bids commonly go higher than is warranted by conservative commercial valuation. The data here submitted is interesting and instructive, and will lead to no erroneous conclusions, provided due allowance is made for the difficulties encountered in applying the rule prescribed by the resolution, and for the limitations upon the theory of valuation which the rule assumes.

The valuation of railway property is submitted in two summaries. The first presents, for the United States and for territorial groups, both the par and the market value of railway capital, classified as capital stock and funded debt. It should be observed that the aggregate amount of securities are those outstanding on June 30, 1900, while the market values given are the average of such values for the four dates named in the resolution.

PAR AND MARKET VALUE OF RAILWAY SECURITIES, CLASSIFIED AS CAPITAL STOCK AND FUNDED DEBT, FOR THE YEAR ENDING JUNE 30, 1900, BY GROUPS.\*

Territory covered.	Railway securities outstanding.		Capital stock.		Funded debt.	
	Par value.	Market value.	Par value.	Market value.	Par value.	Market value.
Group I. . . .	\$472,759,970	\$578,177,824	\$288,910,266	\$403,229,224	\$185,849,704	\$174,948,000
Group II. . . .	\$2,501,711,333	2,171,479,126	\$1,393,766,888	931,286,230	\$1,307,364,445	1,240,192,896
Group III. . . .	\$1,296,973,490	\$28,997,048	\$635,143,402	247,056,432	\$641,830,078	879,939,196
Group IV. . . .	\$623,901,569	309,555,623	\$323,802,855	102,172,312	\$240,188,714	207,383,313
Group V. . . .	\$895,616,499	559,888,941	\$445,172,293	143,161,814	\$650,444,208	416,727,127
Group VI. . . .	\$3,068,179,882	1,637,386,015	\$950,145,708	566,027,312	\$1,115,034,174	1,061,288,703
Group VII. . . .	\$619,373,300	\$41,987,209	\$356,619,200	263,639,811	\$262,789,100	278,347,898
Group VIII. . . .	\$1,576,029,592	\$92,011,963	\$816,483,354	314,510,932	\$759,546,498	677,801,031
Group IX. . . .	\$372,385,728	145,583,288	\$169,217,490	10,024,148	\$283,168,838	185,559,105
Group X. . . .	\$1,160,000,316	\$96,036,919	\$724,113,946	299,034,361	\$485,896,170	329,001,558
United States . .	\$11,724,036,829	\$8,351,103,523	\$6,021,364,502	\$3,250,144,606	\$5,702,671,827	\$5,100,908,927

<sup>1</sup>Includes \$36,735,394, the market value of which is not estimated.

<sup>2</sup>Includes \$187,354,889, the market value of which is not estimated.

<sup>3</sup>Includes \$116,288,063, the market value of which is not estimated.

<sup>4</sup>Includes \$49,267,554, the market value of which is not estimated.

<sup>5</sup>Includes \$107,628,922, the market value of which is not estimated.

<sup>6</sup>Includes \$113,918,906, the market value of which is not estimated.

<sup>7</sup>Includes \$10,695,000, the market value of which is not estimated.

<sup>8</sup>Includes \$45,820,742, the market value of which is not estimated.

<sup>9</sup>Includes \$46,475,944, the market value of which is not estimated.

<sup>10</sup>Includes \$98,991,446, the market value of which is not estimated.

<sup>11</sup>Includes \$812,066,889, the market value of which is not estimated.

<sup>12</sup>Includes \$16,899,316, the market value of which is not estimated.

<sup>13</sup>Includes \$182,662,315, the market value of which is not estimated.

<sup>14</sup>Includes \$75,346,845, the market value of which is not estimated.

<sup>15</sup>Includes \$26,805,020, the market value of which is not estimated.

<sup>16</sup>Includes \$64,754,896, the market value of which is not estimated.

<sup>17</sup>Includes \$55,936,153, the market value of which is not estimated.

<sup>18</sup>Includes \$10,666,000, the market value of which is not estimated.

<sup>19</sup>Includes \$31,829,759, the market value of which is not estimated.

<sup>20</sup>Includes \$30,170,440, the market value of which is not estimated.

<sup>21</sup>Includes \$32,964,029, the market value of which is not estimated.

<sup>22</sup>Includes \$446,347,672, the market value of which is not estimated.

<sup>23</sup>Includes \$20,843,178, the market value of which is not estimated.

<sup>24</sup>Includes \$54,792,574, the market value of which is not estimated.

<sup>25</sup>Includes \$40,941,217, the market value of which is not estimated.

<sup>26</sup>Includes \$21,452,534, the market value of which is not estimated.

<sup>27</sup>Includes \$42,874,026, the market value of which is not estimated.

<sup>28</sup>Includes \$57,982,754, the market value of which is not estimated.

<sup>29</sup>Includes \$809,080, the market value of which is not estimated.

<sup>30</sup>Includes \$13,690,983, the market value of which is not estimated.

<sup>31</sup>Includes \$16,895,594, the market value of which is not estimated.

<sup>32</sup>Includes \$66,027,417, the market value of which is not estimated.

<sup>33</sup>Includes \$365,719,187, the market value of which is not estimated.

N.B.—This means that there are outstanding securities of the par value stated in above foot-notes whose market value could not be ascertained, and those securities are not included in the figures in the columns headed "Market value."

\*The division of the country into groups for the purpose of localizing railway statistics is that customarily used in *Statistics of Railways*.

The second summary presents the main facts a little more in detail by classifying capital stock as common, first preferred, and second preferred, and funded debt as mortgage bonds, miscellaneous obliga-

tions, income bonds, and equipment trust obligations. These phrases are self-explanatory, with the exception of miscellaneous obligations, which are intended to cover obligations that are liens on some species of property specifically described, as distinct from obligations which are general liens on the road and its franchises.

CLASSIFICATION OF THE PAR AND MARKET VALUE OF CAPITAL STOCK AND FUNDED DEBT  
FOR THE YEAR ENDING JUNE 30, 1900, BY GROUPS.

A. CAPITAL STOCK.

Territory covered.	Amount outstanding of capital stock.					
	Common.		First preferred.		Second preferred.	
	Par value.	Market value.	Par value.	Market value.	Par value.	Market value.
Group I. . . . .	\$241,207,260	\$354,091,863	\$45,708,006	\$49,137,261		
Group II. . . . .	1,112,942,210	849,832,048	163,571,678	76,462,182	\$17,248,000	\$4,992,000
Group III. . . . .	462,769,686	137,854,973	170,613,716	102,452,631	21,760,000	6,750,848
Group IV. . . . .	282,279,955	68,088,505	71,477,000	34,083,907	45,900	
Group V. . . . .	356,034,443	104,601,456	88,063,850	37,788,615	1,064,000	771,743
Group VI. . . . .	637,067,613	308,999,173	312,478,096	267,028,189		
Group VII. . . . .	245,735,200	185,397,748	104,454,000	77,723,378	2,430,000	518,787
Group VIII. . . . .	547,433,754	162,889,854	241,549,600	153,506,413	27,500,000	8,414,565
Group IX. . . . .	164,730,990	9,190,812	4,486,500	838,336		
Group X. . . . .	668,066,046	258,150,031	53,047,000	8,392,650	4,000,000	2,491,680
Total . . . . .	\$4,091,867,157	\$2,428,796,563	\$1,254,434,445	\$797,406,410	\$75,062,900	\$23,939,623

B. FUNDED DEBT.

Territory covered.	Amount outstanding of funded debt.							
	Mortgage bonds.		Miscellaneous obligations.		Income bonds.		Equipment trust obligations.	
	Par value.	Market value.	Par value.	Market value.	Par value.	Market value.	Par value.	Market value.
Group I. . . . .	\$133,846,026	\$119,832,989	\$51,589,700	\$55,055,611			\$413,973	\$260,000
Group II. . . . .	1,086,645,340	1,067,582,775	161,436,261	162,126,164	\$38,906,541	\$11,511,729	30,876,303	8,672,238
Group III. . . . .	607,539,119	670,229,665	8,538,878	5,855,559	14,990,300	1,336,000	10,761,781	2,523,072
Group IV. . . . .	223,268,994	200,035,751	10,330,200	6,641,778	5,207,454		1,442,066	705,734
Group V. . . . .	468,265,181	374,820,046	37,068,478	31,458,706	39,173,060	7,785,787	5,937,517	2,662,588
Group VI. . . . .	1,017,740,193	941,034,389	75,865,067	113,993,742	17,732,000	5,654,782	4,196,924	765,790
Group VII. . . . .	241,425,000	246,024,449	21,234,100	29,322,949			100,000	
Group VIII. . . . .	636,364,425	580,284,346	55,992,000	47,482,188	61,845,243	48,827,772	5,244,830	873,723
Group IX. . . . .	174,766,921	134,752,086	909,111		26,257,285	766,020	1,234,921	41,000
Group X. . . . .	364,686,633	327,004,600	44,109,537		27,200,000	1,996,958		
Total . . . . .	\$4,054,387,802	\$4,564,700,995	\$466,573,322	\$441,949,687	\$221,401,883	\$77,899,048	\$60,908,320	\$16,509,197

... A great amount of time and labor has been expended in the effort to comply with this resolution. It was necessary to carefully examine a vast number of railway reports, price lists, and market quotations, and to conduct a long correspondence with thousands of railway officials and other persons presumably able to furnish the requisite information.

It was no easy task to ascertain and eliminate the intercorporate holdings and other duplications of securities, so that the figures presented would fairly represent the total of each class of obligations and the aggregate of railway capitalization. Far more difficult was it to find out by persistent inquiry and letter-writing the actual value of enormous amounts of stocks and bonds which are not listed at all or very rarely transferred in the open market.

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THE John Crerar Library of Chicago has recently made an important purchase, comprising some four thousand volumes and five thousand pamphlets, from the library of Professor Ely, of the University of Wisconsin. While it contains much matter of interest in finance and taxation, its chief importance to scholars lies in the peculiar field of Dr. Ely's work on labor questions and American social movements. It is with a view particularly to the importance of the labor question, both for the country at large and especially for Chicago, that the directors of the Crerar Library have authorized the purchase. The collection on labor was originally deposited in the library of the Wisconsin Historical Society, and was continued and expanded by them, now numbering some six hundred volumes and perhaps two hundred titles. Among the complete files are reports of the Brook Farm Community, the Oneida Community, the Knights of Labor, American Federation of Labor, National Grange, Farmers' Alliance, etc. Among pamphlets are also included those dealing with Chicago anarchists and socialism. Extended files of the ordinary labor papers are also said to be included. It is the purpose of the library to complete and extend the collection, as well as to catalogue and make it accessible to scholars.

## RECENT PUBLICATIONS UPON ECONOMICS.

*Chiefly published or announced since February, 1903.*

*An asterisk prefixed to a title indicates a second and more detailed notice of a book announced in a previous number.*

- |   |   |
|---|---|
| I. General Works. Theory and its History. | VIII. Money, Banking and Exchange.            |
| II. Labor and Capital.                    | IX. Finance and Taxation.                     |
| III. Socialism.                           | X. Industrial Organisation.                   |
| IV. Land and Agrarian Problems.           | XI. Economic History.                         |
| V. Population and Migration.              | XII. Description of Industries and Resources. |
| VI. Transportation.                       | XIII. Statistical Theory and Practice.        |
| VII. Foreign Trade and Colonization.      | XIV. Not Classified.                          |

### I. GENERAL WORKS. THEORY AND ITS HISTORY.

- BEREN. Toward the Light. Elementary Studies in Ethics and Economics. London: Sonnenschein. 1903. 8vo. pp. 244. 2s. 6d.
- COLEMAN (J. M.). Social Ethics. An introduction to the nature and ethics of the state. New York: The Baker & Taylor Co. 1903. 12mo. pp. 357. \$1.25.
- [Emphasizes the spiritual and religious conceptions of justice and the social bond.]
- COSTA (J.) y otros. Derecho consuetudinario y economía popular di España. Barcelona: Heinrich & Co. 1902. 4to. 13 pes.
- DIETZEL (Prof. Heintz.). Das Produzenteninteresse der Arbeiter und die Handelsfreiheit. Ein Beitrag zur Theorie vom Arbeitsmarkt u. vom Arbeitslohn. Jena: G. Fischer. 1903. 8vo. pp. 126. 3 m.
- DUNAND-HENRY (A.). Les doctrines et la politique économique du comte de Cavour. Paris: Pedone. 1902. 8vo. pp. 250.
- ELY (R. T.). The Principles of Economics. New York: The Macmillan Co. 1903. 12mo. [Announced.]
- ERDBERG (Dr. R. v.). Die Wohlfahrtspflege. Eine sozialwissenschaftl. Studie. Jena: G. Fischer. 1903. 8vo. pp. 78. 1.50 m.
- MERRIAM (C. E.). A History of American Political Theories. New York: Macmillan. 1903. 12mo. pp. 364.
- [“While it is true that Americans have never developed systems of politics after the philosophic fashion of the Germans, there has been no dearth of political theory from the days of the Puritans to the present time.” An able review of these theories.]
- PATTEN (S. N.). Heredity and Social Progress. New York: Macmillan. 1903. 12mo. pp. 214. \$1.25.
- [In contrast with much that is written in the field of Sociology, this work takes up a definite problem and discusses it sanely and consistently.]
- PLATTER (Prof. Jul.). Grund-lehren der Nationalökonomie. Kritische Einführung in die soziale Wirtschaftswissenschaft. Berlin: J. Guttentag. 1903. 8vo. pp. 599. 11 m.
- STUCKENBERG (J. H. W.). Sociol

- ogy. The Science of Human Society. New York: G. P. Putnam's Sons. 1903.
- [Announced.]
- VIALLES (P.). La consommation et les crises économiques. Paris: Giard et Brière. 1902. 8vo. 8 fr.
- WARD (L. F.). Pure Sociology: A Treatise on the Origin and Spontaneous Development of Society. New York: Macmillan. 1903. 8vo. pp. 607. \$4.
- [Ambitious in scope and original in treatment, but contains much that is only remotely connected with the subject. Valuable for its terminology, though it errs in attempting too often to state social facts in physical terms.]
- WORMS (R.). Philosophie des sciences sociales. I. Objet des sciences sociales. Paris: Giard et Brière. 1903. 8vo. 4 fr.
- ZORLI (A.). Primi principii di economia sociale, descrittiva e teoretica. Turin: Fratelli Bocca. 1902. 16mo. pp. xiv, 347. 3 l.
- UNSIGNÉ. The Coming Reaction. London: Milne. 1903. 8vo. pp. 320. 10s. 6d.
- [Discusses free trade, the wage-fund theory, rent, etc., in the belief that a reaction is inevitable against democracy and socialism.]
- In Periodicals.
- BIERMANN (W. Ed.). W. Wundt und die Logik der Sozialwissenschaft. Jahrb. f. Nat. Oek., 25, Heft 1.
- COLETTI (F.). Dell' indice unico: studio di semiologia economica. Giorn. degli Econ., Feb., March.
- DE GREEF (G.). Introduction to Sociology, I, II. Amer. Journ. Sociol., Jan. and March.
- KARAPETOFF (W.). On Life-Satisfaction. Amer. Journ. Sociol., March. [In the main an economic study.]
- KULISCHER (Josef). Zur Entwicklungsgeschichte des Kapitalzinses. Jahrb. f. Nat. Oek., 25, Heft 2. [Conclusion; earlier instalments in volumes 18 and 19.]
- MAHAIM (E.). L'économie politique de M. Tarde. Rev. d'Econ. Pol., Jan.
- MURRI (R.). Intorno al programma della democrazia cristiana. Riforma Sociale, March.
- PIGOU (A. C.). Some Remarks on Utility. Econ. Journ., March. [Considered in relation to consumer's rent.]
- SCORZA (G.). A proposito del massimo di oelimità dato dallo libera concorrenza. Giorn. degli Econ., Jan. [Another mathematical criticism of Pareto. The latter, writing in the February number, refuses to continue the controversy.]
- SIMMEL (Georg). Soziologie des Raumes. Jahrb. f. Gesetzg. 1903, Heft 1.
- Macmillan Co. 1903. 12mo. pp. 394.
- [A careful study based upon wide experience and observation.]
- CAVAGNARI (C.). Studi sul contratto del lavoro col testo del progetto di legge in proposito presentato alla Camera dei Deputati. Rome: Soc. editrice libraria. 1902.
- CHALEIX (A.). Les syndicats professionnels patronaux en France. Paris: Rousseau. 1902. 8vo. pp. 205.
- DU BOIS (W. E. B., editor). The Negro Artisan. Report of a Social Study made under the direc-

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- [Announced.]
- ADLER (Prof. Geo.). Ueber die Epochen der deutschen Handwerker - Politik. Jena: G. Fischer. 1903. 8vo. pp. 111. 2.50 m.
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- GILKES (A. H.). The New Revolution. New York: Longmans, Green & Co. 1903.
- HAMANDE (L.) et BURNY (F.). Histoire, exposé des opérations et statistique des caisses d'épargne en Belgique. 3 vols. Loudain: Fonteyn. 1902. 8vo.
- HARMS (Dr. Bernh.). Die holländischen Arbeitskammern. Ihre Entstehg., Organisation u. Wirk-samkeit. Tübingen: J. C. B. Mohr. 1903. 8vo. pp. 210. 5 m.
- HUTCHINS (B. L.) and HARRISON (A.). A History of Factory Leg-islation. London: P. S. King & Son. 8vo. pp. 372. 10s. 6d.
- [A noteworthy contribution, compact, complete, probably the best on English experience. Con-tains an exhaustive bibliography, with appendix on course of women's wages.]
- JANNAOCONE (P.). Sullo sciopero nei servizi pubblici (Atti del IV congresso nazionale delle società economiche, in Turin, Oct., 1902). Turin: Bertolero. 1902. 8vo.
- KAUTSKY (K.). Politique et syndi-cats. Traduction de l'allemand. Paris: Giard et Brière. 1903. 12mo. pp. 65.
- [Favors the entrance of labor organizations in politics.]
- LAMBRECHTS (H.). Le problème social de la petite bourgeoisie en-visagé au point de vue belge. Brussels: Société belge de librairie. 1902. 8vo. pp. 431. 5 fr.
- McKENNA (E. M., editor). The Women's Library. Vol. I. Edu-cation in Professions. London: Chapman & Hall. 1903. 8vo. pp. 368. 5s.
- [Articles by competent writers on a variety of occupations open to women.]
- McKENZIE (F. A.). Famishing London. A Study of the Unem-ployed and Unemployable. Lon-don: Hodder & Stoughton. 1903. 8vo. pp. 88. 1s.
- [A graphic account of present distress.]
- MOISSENET (F.). Étude sur les contrats collectifs en matière de conditions du travail. Paris: Rousseau. 1903. 8vo. pp. 250. 5 fr.
- PALLAIN (A.). La caisse centrale prussienne des associations coopératives. Paris: Baillière. 1902. 8vo. pp. 178. 3.50 fr.
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- SCHIAVI (A.). Gli scioperi e la pro-duzione. Milan: Uffici della Cri-tica Sociale. 1902.
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- SEILHAC (L. de). Les grèves. Paris: Lecoffre. 1903. 12mo. pp. 256. 2 fr.
- SKARZYŃSKI (L.). La question des assurances sociales en Russie (bro-chure). Berlin: Wiskott. 1902. 8vo.
- SURCOUF (J.). Les sociétés coopératives de consommation en France. Rennes: Simon. 1902. 8vo.
- VAN VORST (Mrs. J. and Marie). The Woman who Tolls. New York: Doubleday, Page & Co. 8vo. pp. 308.
- [Contains President Roosevelt's famous prefatory letter on race suicide. Gives the experiences and observations of two women who assumed the rôle of working-girls for purposes of study. Some-what sentimental in tone.]
- VARIOUS. Women Workers. Lon-don: King. 1903. 8vo. pp. 180. 3s.
- [Papers read at the meeting of the National Union of Women Workers of Great Britain and Ire-land, 1902.]
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[The wide difference between restriction and protection is insisted upon.]

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#### *In Periodicals.*

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Some Features of the Labor System and Management at the Baldwin Locomotive Works. Annals Amer. Acad., Jan. ["Every man is proud to be known as a Baldwin man."]

CROSBY (E. H.). The Coal Strike and its Lessons. Arena, Jan.

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DYER (E. J.). The South African Labor Question. Cont. Rev., March.

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KELSEY (C.). The Evolution of Negro Labor. Annals Amer. Acad., Jan. ["We have attempted to hasten natural progress, and are impatient at the seeming meagreness of results."]

MACROSTY (H. W.). State Arbitration in Australasia. Pol. Sci. Quarterly, March. [An optimistic account.]

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- OUTERBRIDGE (A. E., Jr.). The Premium System of Wage Payment. *Annals Amer. Acad.*, Jan. [No system of espionage can prevent loss of time,—“soldiering.”]
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- SCHIAVI (A.). Lavoratori e padroni nel 1902. *Riforma Sociale*, Feb. [Statistics of strikes in Italy, 1900-1901.]
- SUPINO (C.). Sull' importanza sociale dell' odierno movimento operaio. *Riforma Sociale*, Feb.
- WARNE (F. J.). Effect of Unionism upon the Mine Worker. *Annals Amer. Acad.*, Jan.
- WELLMAN (W.). Profit-sharing Plan of the United States Steel Corporation. *Amer. Rev. of Rev.*, March.
- WEYL (W. E.). The Labor Situation in Mexico. *Annals Amer. Acad.*, Jan.
- WOLFF (H. W.). Co-operation and the Poor. *Econ. Rev.*, Jan.
- UNSIGNED. The Past and the Future of Factory Legislation. *Edinb. Rev.*, Jan.

## III. SOCIALISM.

- BRYCE (R. J.). A Short Study of State Socialism. London: Baynes. 8vo. pp. 62. [Collectivism is adversely criticized.]
- DAVID (Eduard). Socialismus und Landwirtschaft. 1 Bd. Die Betriebsfrage. Berlin: Verlag der Socialist. Monatshefte, 1903. 8vo. pp. 703. 12 m.
- KAUTSKY (Karl). The Social Revolution. Translated by A. M. and May Wood Simons. Chicago: C. H. Kerr & Co. 1903. pp. 189. 50 cts. [I. Reform and Revolution. II. The Day after the Revolution.]
- LORIA (A.). Marx e la sua dottrina. Milano: R. Sandron. 8vo. pp. 272. 2 l. [This volume collects six papers from periodicals, the first of 1883 and the others from 1895 to 1899, dealing with Marx's work in a spirit of sympathetic criticism.]
- REEVES (W. P.). State Experiments in Australia and New Zealand. 2 vols. London: Richards. 1902. 8vo. 24s. [A clever apology and defence.]
- RENARD (G.). Le régime socialiste. 3<sup>me</sup> édition revue et augmentée. Paris: Alcan. 1903. 18mo. pp. 210. 2.50 fr.
- SOREL (G.). Saggi di critica del marxismo, con prefazione di V. Racca. Palermo, Milan, Naples: Remo Sandron. 1903. pp. xlviii, 401. 3.50 l.
- WITT (E. de). Saint-Simon et la système industriel. Paris: Larose. 1902. 8vo. pp. 185.
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- ASHLEY (P.). Municipal Policy and State Control. *Econ. Journ.*, March.
- BRAAM (J. W.). The Ruskin Co-operative Colony. *Amer. Journ. Sociol.*, March.
- SHAW (J. J.). Municipal Trading. *Journ. Stat. Soc. of Ireland*, Nov.

## IV. LAND AND AGRARIAN PROBLEMS.

- BASTOGI (Conte G. A.). Una scritta colonica. Florence: M. Ricci. 1903. 8vo. pp. 187. [A contribution to the history, present and past, of the *mezzadria* or *métayer* system in Italy.]

- BERNARD (F.). Les caractères particuliers de l'industrie agricole. Montpellier: Coulet. 1903. 8vo. pp. 72.
- BONONI (A.). Due anni di agitazione agraria nel Polesine. Rovigo. 1903.
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